Compositional Analysis of Forage and Seed from Soybean Event SYTH0H2 Grown During 2010 in the USA

Assessment

DATA REQUIREMENT(S): Not Applicable

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STUDY COMPLETION DATE: November 3, 2011

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LABORATORY PROJECT ID: Report Number: TK0055213
Task Number: TK0055213

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This study is an assessment of data and was not conducted in compliance with the relevant provisions of Good Laboratory Practice Standards (GLPS) (40 CFR Part 160, US EPA 1989) pursuant to the Federal Insecticide, Fungicide, and Rodenticide Act. However, the production of the test, control, and reference samples and the analytical work performed by Covance Laboratories, Inc. were performed in compliance with the relevant provisions of GLPS.

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Records Retention

Raw data, the original copy of this report, and other relevant records are archived at Syngenta, 3054 East Cornwallis Road, Research Triangle Park, NC 27709-2257 USA.

Additional Performing Laboratories

The contract research companies that conducted the field trials that produced the samples for this study are identified in Appendix B.

The nutritional analysis of the samples was performed at Covance Laboratories, Inc.

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LIST OF ACRONYMS AND ABBREVIATIONS

ADF	acid detergent fiber
ANOVA	analysis of variance
avhppd-03	*p*-hydroxyphenylpyruvate dioxygenase gene derived from *Avena sativa* (oat)
AvHPPD-03	*p*-hydroxyphenylpyruvate dioxygenase enzyme encoded by *avhppd-03*
CFR	Code of Federal Regulations
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
GLPS	Good Laboratory Practice Standards
HPPD	*p*-hydroxyphenylpyruvate dioxygenase enzyme
ILSI	International Life Sciences Institute
LOQ	limit of quantitation
N.D.	no date
NDF	neutral detergent fiber
OECD	Organisation for Economic Co-operation and Development
pat	phosphinothricin acetyltransferase gene from *Streptomyces*
PAT	phosphinothricin acetyltransferase enzyme
R6	soybean growth stage at which there is a pod containing a green seed that fills the pod cavity at one of the four uppermost nodes on the main stem with a fully developed trifoliolate leaf node
R8	soybean growth stage at which 95% of the pods have reached their mature pod color
SEM	standard error of mean
TSH	trait-specific herbicide
V3	soybean growth stage with three fully developed trifoliate leaf nodes
V4	soybean growth stage with four fully developed trifoliate leaf nodes
US EPA	United States Environmental Protection Agency

AMINO ACID ABBREVIATIONS

Ala	alanine
Arg	arginine
Asp	aspartic acid
Cys	cystine
Glu	glutamic acid
Gly	glycine
His	histidine
Ile	isoleucine
Leu	leucine
Lys	lysine
Met	methionine
Phe	phenylalanine
Pro	proline
Ser	serine
Thr	threonine
Trp	tryptophan
Tyr	tyrosine
Val	valine

1.0 EXECUTIVE SUMMARY

Key nutritional components in soybean forage and seed from plants derived from transformation Event SYHT0H2 were measured and compared with those in forage and seed from a nontransgenic, near-isogenic control soybean. Soybean (*Glycine max* [L.] Merrill) has been genetically modified to express the genes *avhppd-03* derived from oat *(Avena sativa* L.*)* and *pat* from *Streptomyces viridochromogenes*. The gene *avhppd-03* encodes a *p*-hydroxyphenylpyruvate dioxygenase (HPPD) enzyme, designated AvHPPD-03. Expression of *avhppd-03* in the transgenic Event SYHT0H2 soybean plants confers a phenotype that is tolerant to the herbicide mesotrione. The gene *pat* confers a glufosinate-tolerance phenotype, which was used as a selectable marker in the development of Event SYHT0H2 soybeans.

SYHT0H2 soybean and the corresponding nontransgenic, near-isogenic control soybean were grown at eight locations in the USA in 2010. At each location, SYHT0H2 soybean, SYHT0H2 soybean treated with the trait-specific herbicides mesotrione and glufosinate, and the control soybean were grown in a randomized complete block design with four replicates per entry. Forage and seed were analyzed for key food and feed nutrients and anti-nutrients; these components were chosen largely based on the recommendations of the Organisation for Economic Co-operation and Development for analysis of new varieties of soybean. Forage was analyzed for proximates (moisture, protein, fat, ash, carbohydrates, acid detergent fiber, and neutral detergent fiber) and seed was analyzed for proximates, minerals, vitamins (including vitamin E isoforms), amino acids, fatty acids, and anti-nutrients. Analysis of variance was used to test for entry effects across locations and at each location (1) between the untreated SYHT0H2 soybean and the control soybean, and (2) between SYHT0H2 soybean treated with trait-specific herbicides and the control soybean. In addition, mean levels of components were compared non-statistically with (1) the ranges of variation for six nontransgenic soybean reference varieties grown simultaneously at the same locations, and (2) the ranges of variation for conventional soybean published in the International Life Sciences Institute (ILSI) Crop Composition Database.

In the across-location comparisons between untreated SYHT0H2 soybean and the control soybean, and between SYHT0H2 soybean treated with the trait-specific herbicides mesotrione and glufosinate and the control soybean, statistically significant differences were observed. However, the magnitudes of most differences were less than 10% and some differences were observed in only one of the comparisons. Higher levels of the vitamin E isoforms γ-tocopherol and δ-tocopherol in SYHT0H2 seed resulted in the largest significant differences that were observed in both comparisons.

Increased levels of γ-tocopherol and δ-tocopherol in the SYHT0H2 soybean were expected because overexpression of genes encoding HPPD in tobacco and *Arabidopsis* has been reported to result in increased seed tocochromanols. Tocopherol levels are also highly influenced by both environment and genotype and vary widely in conventional soybean, including a 6-fold range in γ-tocopherol levels and a 9-fold range in δ-tocopherol levels reported across 66 conventional soybean varieties.

Because vitamin E activity resulting from the γ-tocopherol and δ-tocopherol isoforms is very small (*i.e.* only 10% and 3% respectively of the antioxidant activity of α-tocopherol), the observed increase would have negligible impact on overall vitamin E activity.

Across-location mean levels of all components in the untreated and the trait-specific-herbicide-treated SYHT0H2 soybean were within the ranges of the component levels in the nontransgenic reference varieties grown at the same locations, and most mean levels were within the ranges of levels published in the ILSI database.

Based on these data, it is concluded that forage and seed from the SYHT0H2 soybean differ in composition when compared to the control soybean. Based on comparisons with ranges of component levels published in the ILSI database, and with ranges of component levels in reference varieties of soybean grown simultaneously at the same locations, it is concluded that the nutrient composition of SYHT0H2 soybean is not materially different from that of conventional soybean varieties.

2.0 INTRODUCTION

The purpose of this study was to measure and compare key food and feed nutrients and anti-nutrients of forage and seed from soybean plants derived from transformation Event SYHT0H2 and a nontransgenic, near-isogenic control soybean, as part of a food and feed safety assessment.

Soybean (*Glycine max* [L.] Merrill) has been genetically modified to express the genes *avhppd-03* derived from oat *(Avena sativa* L.*)* and *pat* from *Streptomyces viridochromogenes*. The gene *avhppd-03* encodes a *p*-hydroxyphenylpyruvate dioxygenase (HPPD) enzyme, designated AvHPPD-03, that catalyzes the formation of homogentisic acid, the aromatic precursor in plastoquinone and vitamin E biosynthesis. In comparison with the native soybean HPPD, the AvHPPD-03 isozyme from oat has lower binding affinity for mesotrione, an herbicide that inhibits HPPD. Expression of *avhppd-03* in the transgenic Event SYHT0H2 soybean plants confers a mesotrione-tolerance phenotype. The gene *pat* encodes the enzyme phosphinothricin acetyltransferase (PAT), which inactivates the herbicide glufosinate, an inhibitor of glutamine synthetase, an enzyme in the nitrogen assimilation pathway. Expression of *pat* confers a glufosinate-tolerance phenotype, which was used as a selectable marker in the development of Event SYHT0H2 soybeans.

Conventional agronomic practices were used to plant, maintain, and harvest replicate plots of SYHT0H2 soybean, the corresponding nontransgenic, near-isogenic control soybean, and six soybean reference varieties at locations in agricultural regions suitable for the cultivation of these varieties (Negrotto, N.D.). Forage and seed were analyzed for various nutritional and anti-nutritional components (Miller 2011). Component levels were statistically compared (1) between SYHT0H2 soybean and the control soybean, and (2) between SYHT0H2 soybean treated with the trait-specific herbicides (TSH) mesotrione and glufosinate and the control soybean.

In addition, mean levels of components were compared non-statistically with ranges of component levels from the nontransgenic soybean reference varieties, and with ranges for conventional soybean published in the International Life Sciences Institute Crop Composition Database (ILSI 2010).

3.0 MATERIALS AND METHODS

3.1 Sample origin

3.1.1 Test, control, and reference substances

In study TK0027507 that generated the test, control, and reference samples (Negrotto, N.D.), the test substance was SYHT0H2 soybean seed in the genetic background 'Jack' (Nickell *et al.* 1990). The control substance was nontransgenic, near-isogenic soybean seed of the same genetic background as the test substance, and the reference substances were seed of six nontransgenic soybean varieties. Table 1 shows the descriptions for the test, control, and reference substances.

TABLE 1 Test, control, and reference substances

Entry ID	Seed identification	Material identification
E01	Nontransgenic, near-isogenic (control)	10SG900904
E06	SYHT0H2 (test)	10SG900903
E07	SYHT0H2 + trait-specific herbicides (test + TSH)	10SG900903
E08	Reference 1	10SG900905
E09	Reference 2	10SG900906
E10	Reference 3	10SG900907
E11	Reference 4	10SG900908
E12	Reference 5	10SG900909
E13	Reference 6	10SG900910

Field-grown seed lots of the test and control substances were characterized by real-time polymerase chain reaction testing (Ingham *et al.* 2001) to confirm identity and purity.

A pedigree chart illustrating the production of the test-substance seed shown in Table 1 can be found in Appendix A.

3.1.2 Field trials

Two entries of SYHT0H2 soybean, one entry of the corresponding control soybean, and one entry of each of the six reference substances were grown at eight locations in the USA (Table 2) in field trials conducted in accordance with the Good Laboratory Practice Standards (40 CFR Part 160, Federal Register, 1989) (Negrotto, N.D.). These locations are representative of the agricultural regions suitable for the cultivation of the varieties shown in Table 1.

TABLE 2 Field trial locations

Location Code	City and State	Field Trial Number
L01	Richland, Iowa	10ACR017–27507L01
L02	York, Nebraska	10ACR049–27507L02
L03	Fisk, Missouri	10ACR028–27507L03
L04	Stewardson, Illinois	10ACR069–27507L04
L07	Mebane, North Carolina	10ACR035–27507L07
L08	Hamburg, Pennsylvania	10ACR056–27507L08
L09	Carlyle, Illinois	10ACR067–27507L09
L10	Rockville, Indiana	10ACR068–27507L10

At each location, the entries were grown in a randomized complete block design with four replicate plots. One entry of SYHT0H2 soybean was treated with the trait-specific herbicides (TSH) mesotrione and glufosinate at the V3–V4 growth stage (Pederson 2009). All entries were treated with conventional pesticides as needed in order to maintain optimal plant health. Two additional entries unrelated to this assessment were also grown in these trials.

The Field Trial Summary Report (Appendix B) provides an overview of the field trial at each location, including personnel involved in the conduct of the field trials, environmental conditions, cultivation practices, and the entry randomizations.

3.1.3 Forage sampling and processing

The entire above-ground portion of ten plants was harvested at full seed (R6 stage; Pederson 2009) from each plot. Plants were chopped and pooled to create a composite sample for each plot. A subsample of approximately 300 g from each well-mixed composite sample was frozen within two hours of harvest, shipped to Syngenta Crop Protection, LLC (Greensboro NC, USA) and stored at -20°C ± 10°C. The subsamples were then finely ground and shipped on dry ice to Covance Laboratories, Inc. (Madison WI, USA) for analysis (Negrotto, N.D.). The samples were stored at -20°C ± 10°C until they were analyzed.

3.1.4 Seed sampling and processing

After plants reached full maturity (R8 stage; Pederson 2009) pods were collected from 30 plants from each plot. Seeds were shelled from the pods and a well-mixed subsample of approximately 300 g of seed from each plot was shipped at ambient temperature to Syngenta Crop Protection (Greensboro NC) where it was stored at -20°C ± 10°C. One sample (Location 10, Entry 6, Replicate 2) was not received. The subsamples were then finely ground and shipped on dry ice to Covance Laboratories, Inc. (Negrotto, N.D.) where they were stored at -20°C ± 10°C until they were analyzed.

4.0 MEASUREMENT OF NUTRIENT COMPOSITION

The nutritional components measured in soybean forage and seed were chosen largely based on recommendations of the Organisation for Economic Co-Operation and Development (OECD 2001) for analysis of new varieties of soybean. Forage and seed were analyzed for the components shown in Tables 3 and 4.

TABLE 3 Components analyzed in soybean forage

Proximates
moisture
protein
fat
ash
carbohydrates
ADF[a]
NDF[b]

[a] Acid detergent fiber
[b] Neutral detergent fiber

TABLE 4 Components analyzed in soybean seed

Proximates	Minerals	Vitamins	Vitamin E
moisture	calcium	A (β-carotene)	α-tocopherol
protein	iron	B_1 (thiamine)	β-tocopherol
fat	magnesium	B_2 (riboflavin)	γ-tocopherol
ash	phosphorus	B_9 (folic acid)	δ-tocopherol
carbohydrates	potassium	K_1 (phytonadione)	α-tocotrienol
ADF[a]			β- tocotrienol
NDF[b]			γ- tocotrienol
			δ-tocotrienol
Amino acids		**Fatty acids[c]**	**Anti-nutrients**
alanine	lysine	16:0 palmitic	daidzein
arginine	methionine	17:0 heptadecanoic	glycitein
aspartic acid	phenylalanine	18:0 stearic	genistein
cystine	proline	18:1 oleic	lectin
glutamic acid	serine	18:2 linoleic	phytic acid
glycine	threonine	18:3 linolenic	raffinose
histidine	tryptophan	20:0 arachidic	stachyose
isoleucine	tyrosine	20:1 eicosenoic	trypsin inhibitor
leucine	valine	22:0 behenic	

[a] Acid detergent fiber
[b] Neutral detergent fiber
[c] Soybean seed was analyzed for 22 fatty acids; the nine shown had quantifiable levels.

Measurement of the nutrient composition of the forage and seed samples was conducted by Covance Laboratories, Inc. (Madison, WI USA) in accordance with Good Laboratory Practice Standards (40 CFR Part 160, Federal Register, 1989) (Miller 2011). The methods used were published and approved by AOAC International or were other industry-standard methods, or were based on literature references and were developed and validated by Covance (analytical methods are described in Appendix D). Component levels were converted to equivalent units of dry weight (DW) based on the moisture content of each sample.

5.0 CONTROL OF BIAS STATEMENT

The samples were produced at multiple test sites to encompass the regions where the crop is grown commercially. Entries within each trial were grown in a randomized complete block design and plants were chosen randomly to avoid bias in sampling. Representative aliquots were analyzed from homogeneous samples. To minimize assay bias, the samples were analyzed in a random order.

6.0 STATISTICAL ANALYSIS

6.1 Across-location comparisons

The data for each quantifiable component were subjected to analysis of variance (ANOVA) using the following mixed model:

$$Y_{ijk} = U + T_i + L_j + B(L)_{jk} + LT_{ij} + e_{ijk}$$

In this model, Y_{ijk} is the observed response for entry i at location j block k, U is the overall mean, T_i is the entry effect, L_j is the location effect, $B(L)_{jk}$ is the effect of block within location, LT_{ij} is the location-by-entry interaction effect, and e_{ijk} is the residual error. Entry was regarded as a fixed effect, while the effects of location, block within location, and location-by-entry interaction were regarded as random. In the across-location analysis, only the control, test, and test + TSH entries were included to avoid the possibility of the residual error being inflated by any interaction between location and reference varieties that may have been present.

For each component, *t*-tests were used to assess the statistical significance of the two comparisons of interest (*i.e.* test *vs.* control, and test + TSH *vs.* control). Significance was based on an alpha level of 0.05, and denominator degrees of freedom were determined by the Kenward-Roger method (Kenward and Roger 1997). The standard error of the mean (SEM) was also determined for each component. In cases where the number of replicates per entry differed because of missing samples, the SEM for each component was determined separately for each entry.

6.2 Individual-location comparisons

The data for each component at each location were subjected to ANOVA using the mixed model:

$$Y_{ij} = U + T_i + B_j + e_{ij}$$

In this model, Y_{ij} is the observed response for entry i and block j, U is the overall mean, T_i is the entry effect, B_j is the effect of block, and e_{ij} is the residual error. Entry was regarded as a fixed effect, while the effect block was regarded as random. In the individual-location analysis, all nine entries were included.

For each component at each location, *t*-tests were used to assess the statistical significance of the two comparisons of interest (*i.e.*, test *vs.* control, and test + TSH *vs.* control). Significance was based on an alpha level of 0.05, and denominator degrees of freedom were determined by the Kenward-Roger method (Kenward and Roger 1997). The standard error of the mean (SEM) was also determined for each component. In cases where the number of replicates per entry differed because of missing samples, the SEM for each component was determined separately for each entry.

Statistical analyses for across-location and individual-location comparisons were performed using SAS v. 9.2 (SAS Institute, Inc., Cary NC, USA).

6.3 Comparison with nontransgenic reference varieties

The mean levels of each component in the test soybean and in the test + TSH soybean were compared nonstatistically with the ranges of component levels for forage and seed from the nontransgenic soybean reference varieties.

6.4 Comparison with ILSI crop composition database

The mean levels of each component in the test soybean and in the test + TSH soybean were compared nonstatistically with the ranges of conventional soybean forage and seed composition published in the ILSI Crop Composition Database (2010). The ILSI database is a comprehensive source of crop composition data for most nutritional components.

7.0 RESULTS

Tables 5 through 20 report the statistical comparisons of component levels in forage and seed (1) between untreated SYHT0H2 soybean ("test") and nontransgenic, near-isogenic control soybean ("control"), and (2) between SYHT0H2 soybean treated with the trait-specific herbicides mesotrione and glufosinate ("test + TSH") and the control soybean. Also shown are the mean levels for each entry across locations and at each location, the mean levels and ranges for the six nontransgenic soybean reference varieties ("reference varieties"), and the mean levels and ranges for conventional soybean reported in the ILSI Crop Composition Database (2010).

The results presented in this section are for the across-location comparisons. Summary tables presenting the individual-location mean values and results of the individual-location statistical comparisons are provided in Appendix C, Tables C–1 through C–16. The results of the statistical comparisons at each location were consistent with the results of the across-location comparisons.

7.1 Forage composition

Proximates. As shown in Table 5, no significant differences in proximate levels (moisture, protein, fat, ash, carbohydrates, ADF, and NDF) were observed between the test soybean and the control soybean.

As shown in Table 6, the levels of moisture, protein, ash, carbohydrates, ADF, and NDF did not differ significantly between the test + TSH soybean and the control soybean. In the test + TSH soybean, the level of fat was significantly lower than in the control soybean.

In both the test soybean and test + TSH soybean, mean levels of all proximates were within the ranges for the reference varieties. All mean levels except moisture, fat, and ash were within the ranges reported in the ILSI database. The mean level of ash was below the ILSI range in the test soybean. In the test soybean and test + TSH soybean, the mean levels of moisture were below the ILSI range and the mean levels of fat were above the ILSI range.

7.2 Seed composition

Proximates. As shown in Table 7, the levels of moisture, protein, fat, ash, carbohydrates, and NDF did not differ significantly between the test soybean and the control soybean. In the test soybean, the levels of ADF were significantly lower than in the control soybean.

As shown in Table 8, no significant differences were observed in levels of any proximates (moisture, protein, fat, ash, carbohydrates, ADF, and NDF) between the test + TSH soybean and the control soybean.

In both the test soybean and test + TSH soybean, the mean levels of proximates were within the ranges of the reference varieties, and were within the ranges reported in the ILSI database.

Minerals. As shown in Tables 9 and 10, the levels of calcium, magnesium, and phosphorus did not differ significantly between the test soybean or the test + TSH soybean and the control soybean. In the test soybean and test + TSH soybean, the levels of iron and potassium were significantly lower than in the control soybean.

In both the test soybean and test + TSH soybean, mean levels of all minerals were within the ranges for the reference varieties. All mean levels, except potassium, were within the ranges reported in the ILSI database. The mean levels of potassium were below the ILSI range in both the test soybean and test + TSH soybean.

Vitamins. As shown in Table 11, no significant differences were observed in levels of any vitamins (vitamins B_1, B_2, B_9, and K_1) between the test soybean and the control soybean.

As shown in Table 12, the levels of vitamins B_1, B_2, and B_9 did not differ significantly between the test + TSH soybean and the control soybean. The level of vitamin K_1 was significantly lower in the test + TSH soybean than in the control soybean.

For β-carotene, mean levels could not be calculated and ANOVA could not be performed because some levels were below the limit of quantitation (LOQ).

In both the test soybean and test + TSH soybean, the mean levels of all quantifiable vitamins were within the ranges of the reference varieties, and the mean levels of vitamin B_9 were within the range reported in the ILSI database. The mean levels of vitamins B_1 and B_2 were above the ILSI ranges in both the test soybean and the test + TSH soybean. The ILSI database does not contain soybean seed data for β-carotene or vitamin K_1.

Vitamin E. As shown in Table 13, the level of α-tocopherol was significantly lower in the test soybean than in the control soybean and the levels of γ-tocopherol and δ-tocopherol were significantly higher.

As shown in Table 14, the levels of α-tocopherol did not differ significantly between the test + TSH soybean and the control soybean. In the test + TSH soybean, the levels of γ-tocopherol and δ-tocopherol were significantly higher than in the control soybean.

For β-tocopherol and all tocotrienols, mean levels could not be calculated and ANOVA could not be performed because some or all component levels were below the LOQ.

In both the test soybean and test + TSH soybean, the mean levels of α-tocopherol, γ-tocopherol and δ-tocopherol were within the ranges for the reference varieties, and levels of α-tocopherol were within the range reported in the ILSI database. No ranges for the other tocopherols or any tocotrienols were available for comparison in the ILSI database.

Amino Acids. As shown in Table 15, the levels of six amino acids (glycine, cystine, valine, methionine, isoleucine, and tryptophan) did not differ significantly between the test soybean and the control soybean. The levels of aspartic acid, threonine, serine, glutamic acid, proline, alanine, leucine, tyrosine, phenylalanine, lysine, histidine, and arginine were significantly higher.

As shown in Table 16, the levels of nine amino acids (threonine, serine, glycine, alanine, cystine, valine, isoleucine, tyrosine, and tryptophan) did not differ significantly between the test + TSH soybean and the control soybean. The levels of aspartic acid, glutamic acid, proline, methionine, leucine, phenylalanine, lysine, histidine, and arginine were significantly higher in the test + TSH soybean than in the control soybean.

In both the test soybean and test + TSH soybean, the mean levels of all amino acids were within the ranges of the reference varieties and all were within the ranges reported in the ILSI database except tryptophan. In both the test soybean and the test + TSH soybean, the mean levels of tryptophan were above the ILSI range.

Fatty Acids. As shown in Table 17, the proportions of all quantifiable fatty acids as fractions of total fatty acids differed significantly between the test soybean and the control soybean, except 20:1 eicosenoic acid. In the test soybean, the levels of 18:2 linoleic and 18:3 linolenic acids were significantly lower in the test soybean than in the control soybean and the levels of 16:0 palmitic, 18:0 stearic, 18:1 oleic, 20:0 arachidic, and 22:0 behenic acids were significantly higher.

As shown in Table 18, the proportions of 18:3 linolenic and 20:1 eicosenoic fatty acids as fractions of total fatty acids did not differ significantly between the test + TSH soybean and the control soybean. The level of 18:2 linoleic acid was significantly lower in the test + TSH soybean than in the control soybean and the levels of 16:0 palmitic, 18:0 stearic, 18:1 oleic, 20:0 arachidic, and 22:0 behenic acids were significantly higher.

For 17:0 heptadecanoic acid in the test and test + TSH soybean, mean proportions could not be calculated and ANOVA could not be performed because some levels were below the LOQ.

In both the test soybean and test + TSH soybean, the mean levels of all quantifiable fatty acids were within the ranges of the reference varieties and all were within the ranges reported in the ILSI database.

Anti-nutrients. As shown in Tables 19 and 20, no significant differences were observed in levels of any anti-nutrients (daidzein, glycitein, genistein, lectin, phytic acid, raffinose, stachyose, and trypsin inhibitor) between the test soybean or test + TSH soybean and the control soybean.

In both the test soybean and test + TSH soybean, mean levels of all anti-nutrients were within the ranges for the reference varieties. All mean levels except lectin, raffinose, and stachyose, were within the ranges reported in the ILSI database. The mean levels of lectin, raffinose and stachyose in both the test soybean and the test + TSH soybean were above the ILSI ranges.

7.3 Data quality and integrity

No circumstances occurred during conduct of this study that would have adversely affected the quality or integrity of the data generated. The test, control, and reference samples were produced and analyzed in accordance with the Good Laboratory Practice Standards (GLPS). Although the statistical analyses were not performed in accordance with the GLPS, industry-validated software was used for the analyses, and documentation of those analyses was retained. This deviation from the GLPS had no material impact on the study.

8.0 DISCUSSION AND CONCLUSIONS

In the across-location comparisons between untreated SYHT0H2 soybean (test) and the control soybean, or between SYHT0H2 soybean treated with the trait-specific herbicides mesotrione and glufosinate (test + TSH) and the control soybean, statistically significant differences were observed. However, the magnitudes of most differences were less than 10% and some differences were observed in only one of the comparisons. In the SYHT0H2 soybean, higher levels of the vitamin E isoforms γ-tocopherol and δ-tocopherol in seed resulted in the largest significant differences that were observed in both comparisons.

Increased levels of γ-tocopherol and δ-tocopherol in the SYHT0H2 soybean were expected because overexpression of genes encoding HPPD in tobacco (Falk *et al.* 2003) and *Arabidopsis* (Collakova and DellaPenna 2003, Tsegaye *et al.* 2002) has been reported to result in increased seed tocochromanols. Tocopherol levels are also highly influenced by both environment and genotype and vary widely in conventional soybean (Carrão-Panizzi & Erhan 2007, Dolde *et al.* 1999, Seguin *et al.*2010, Ujie *et al.* 2005), including a 6-fold range in γ-tocopherol levels and a 9-fold range in δ-tocopherol levels reported across 66 conventional soybean varieties (Rani *et al.* 2007).

Because vitamin E activity resulting from the γ-tocopherol and δ-tocopherol isoforms is very small (*i.e.* only 10% and 3% respectively of the antioxidant activity of α-tocopherol) (DellaPenna 2005), the observed increase would have negligible impact on overall vitamin E activity.

Across-location mean levels of all components in the test soybean and the test + TSH soybean were within the ranges of the component levels in the nontransgenic reference varieties grown at the same locations, and most mean levels were within the ranges of levels published in the ILSI database.

Based on these data, it is concluded that forage and seed from SYHT0H2 soybean differs in composition when compared to the near-isogenic control soybean. Based on comparisons with ranges of component levels published in the ILSI database, and with ranges of component levels in reference varieties of soybean grown simultaneously at the same locations, it is concluded that the nutrient composition of SYHT0H2 soybean is not materially different from that of conventional soybean varieties.

9.0 REFERENCES

Carrão-Panizzi MC, Erhan SZ. 2007. Environmental and genetic variation of soybean tocopherol content under Brazilian growing conditions. *J Am Oil Chem Soc* 84:921–928.

Collakova E, DellaPenna D. 2003. Homogentisate phytyltransferase activity is limiting for tocopherol biosynthesis in Arabidopsis. *Plant Physiology* 131:632–642.

DellaPenna D. 2005. A decade of progress in understanding vitamin E synthesis in plants. *J Plant Physiol* 162:729–737.

Dolde D, Vlahakis C, Hazebroek J. 1999. Tocopherols in breeding lines and effects of planting location, fatty acid composition, and temperature during development. *J Am Oil Chem Soc* 76:349–355.

Falk J, Andersen G, Kernebeck B, Krupinska K. 2003. Constitutive overexpression of barley 4-hydroxyphenylpyruvate dioxyenase in tobacco results in elevation of the vitamin E content in seeds but not in leaves. *FEBS Lett* 540:35–40.

ILSI. 2010. *International Life Sciences Institute Crop Composition Database,* v. 4.2. http://www.cropcomposition.org/query/workflow.wiz?_flowExecutionKey=_cA7F4B946-6363-4348-11BE-41337A9A24CA_k93E17A8F-A183-1098-64AA-70BE811DD966; search parameters: crop type = "SOYBEAN," tissue type = "FORAGE" or "SEED", crop year = "All", country = "All," and regions = "All"; (accessed July 14, 2011)

Ingham DJ, Beer S, Money S, Hansen G. 2001. Quantitative real-time PCR assay for determining transgene copy number in transformed plants. *BioTechniques* 31:136–140.

Kenward MG, Roger JH. 1997. Small sample inference for fixed effects from restricted maximum likelihood. *Biometrics* 53:983–997.

Miller K. 2011. *Determination of Nutrient Composition of Soybean Forage and Seed Samples Grown in the US in 2010 in Syngenta Study No. TK0027507.* Covance Study No. 8243-139 (unpublished). Madison, WI: Covance Laboratories, Inc. Submitted to Syngenta Crop Protection, LLC, Greensboro, NC. 465 pp.

Negrotto D. N.D.. *Agronomic Assessment of Transgenic Soybean Grown in the US in 2010 and Production of Forage and Seed Samples for Composition Analysis.* Study No. TK0027507 (unpublished). Research Triangle Park, NC: Syngenta Crop Protection, LLC.

Nickell CD, Noel GR, Thomas DJ, Waller R. 1990. Registration of 'Jack' soybean. *Crop Sci* 30:1365.

OECD. 2001. *Consensus Document on Compositional Considerations for New Varieties of Soybean: Key Food and Feed Nutrients and Anti-Nutrients.* Series on the Safety of Novel Foods and Feeds, No. 2. Paris, France: Joint Meeting of the Chemicals Committee and the Working Party on Chemicals, Pesticides and Biotechnology, Environment Directorate, Organisation for Economic Co-operation and Development. 30 pp. http://www.oecd.org/dataoecd/15/60/46815135.pdf (accessed August 3, 2011).

Pederson, P. 2009. *Soybean Growth and Development.* Ames, IA: Iowa State University, University Extension. 28 pp.

Rani A, Kumar V, Verma S, Shakya A, Chauhan G. 2007. Tocopherol content and profile of soybean: Genotypic variability and correlation studies. *J Am Oil Chem Soc* 84:377–383.

Seguin P, Tremblay G, Pageau D, Liu W. 2010. Soybean tocopherol concentrations are affected by crop management. *J Agric Food Chem* 58:5495–5501.

Tsegaye Y, Shintani DK, DellaPenna D. 2002. Overexpression of the enzyme *p*-hydroxyphenylpyruvate dioxygenase in *Arabidopsis* and its relation to tocopherol biosynthesis. *Plant Physiol Biochem* 40:913–920.

Ujie A, Yamada T, Fujimoto K, Endo Y, Kitamura K. 2005. Identification of soybean varieties with high α-tocopherol content. *Breed Sci* 55:123–125.

US EPA. 1989. Good Laboratory Practice Standards. 40 CFR Part 160.

TABLE 5 Forage proximate composition: Across-location comparison of SYHT0H2 soybean (test) and nontransgenic soybean (control)

Data source	Statistic	Moisture	Protein	Fat	Ash	Carbohydrates	ADF	NDF
Test[a]	mean	70.4	18.9	6.04	6.39	68.7	26.8	33.0
	range	60.8–75.1	14.4–22.8	4.03–8.72	4.78–8.39	63.8–74.2	21.7–31.9	26.5–38.5
Control[a]	mean	69.9	18.4	6.15	6.73	68.7	27.3	32.6
	range	58.5–74.5	13.5–22.1	3.22–8.84	5.34–8.18	63.9–74.8	22.6–35.8	26.9–37.5
ANOVA (*t*-test) entry effect and standard error of means								
	p	0.315	0.203	0.595	0.065	0.966	0.464	0.686
	SEM	0.94	0.53	0.477	0.251	0.82	0.61	0.71
Reference varieties[b]	mean	70.7	19.6	6.82	6.77	66.8	26.3	31.6
	range	53.2–76.4	12.0–25.1	2.68–11.40	5.06–8.88	58.9–75.2	18.4–38.3	23.0–44.2
ILSI (2010)[c]	mean	77.0	19.38	3.138	9.036	68.5		
	range	73.5–81.6	14.38–24.71	1.302–5.132	6.718–10.782	59.8–74.7	ND	ND
	N	72	72	72	72	72		

Proximate levels shown as percent dry weight (% DW), except moisture which is shown as percent fresh weight (% FW)
Results significantly different ($p < 0.05$) are shown in bold italic type
[a] $N = 32$
[b] $N = 192$
[c] ND indicates that no data were available

TABLE 6 Forage proximate composition: Across-location comparison of SYHT0H2 soybean treated with trait-specific herbicides (test + TSH) and nontransgenic soybean (control)

Data source	Statistic	Moisture	Protein	Fat	Ash	Carbohydrates	ADF	NDF
Test + TSH[a]	mean	70.8	18.7	5.66	6.74	68.9	26.3	32.0
	range	66.7–74.6	14.7–22.0	3.23–8.10	5.22–8.22	63.9–75.0	20.6–31.8	24.3–37.1
Control[b]	mean	69.9	18.4	6.15	6.73	68.7	27.3	32.6
	range	58.5–74.5	13.5–22.1	3.22–8.84	5.34–8.18	63.9–74.8	22.6–35.8	26.9–37.5
ANOVA (*t*-test) entry effect and standard error of means								
	p	0.105	0.418	***0.039***	0.944	0.671	0.183	0.432
	SEM	0.94	0.53	0.477	0.251	0.82	0.61	0.71
Reference varieties[c]	mean	70.7	19.6	6.82	6.77	66.8	26.3	31.6
	range	53.2–76.4	12.0–25.1	2.68–11.40	5.06–8.88	58.9–75.2	18.4–38.3	23.0–44.2
ILSI (2010)[d]	mean	77.0	19.38	3.138	9.036	68.5		
	range	73.5–81.6	14.38–24.71	1.302–5.132	6.718–10.782	59.8–74.7	ND	ND
	N	72	72	72	72	72		

Proximate levels shown as percent dry weight (% DW), except moisture which is shown as percent fresh weight (% FW)
Results significantly different ($p < 0.05$) are shown in bold italic type
[a] Treated with the trait-specific herbicides (TSH) mesotrione and glufosinate, N = 32
[b] $N = 32$
[c] $N = 192$
[d] ND indicates that no data were available

TABLE 7 Seed proximate composition: Across-location comparison of SYHT0H2 soybean (test) and nontransgenic soybean (control)

Data source	Statistic	Moisture	Protein	Fat	Ash	Carbohydrates	ADF	NDF
Test[a]	mean	8.66	38.6	20.5	5.29	35.5	13.9	16.0
	range	6.84–12.2	32.6–41.4	18.0–22.9	4.29–6.92	32.5–39.7	10.0–18.2	13.0–19.6
Control[b]	mean	8.70	38.2	20.7	5.25	35.7	14.8	16.7
	range	5.90–12.6	32.2–44.7	18.9–22.8	4.08–6.62	29.3–40.1	10.3–18.0	12.6–21.3
ANOVA (*t*-test) entry effect and standard error of means								
	p	0.786	0.280	0.271	0.549	0.602	***0.044***	0.069
	SEM	0.533, 0.533	0.70, 0.70	0.31, 0.31	0.171	0.56, 0.56	0.40, 0.40	0.35, 0.35
Reference varieties[c]	mean	9.18	38.1	20.4	5.26	36.2	14.6	16.3
	range	6.10–14.30	30.6–44.4	15.8–25.0	4.14–6.59	25.2–43.8	8.20–20.6	11.2–21.9
ILSI (2010)	mean	10.1	39.47	16.681	5.320	38.2	11.97	12.33
	range	4.7–34.4	33.19–45.48	8.104–23.562	3.885–6.994	29.6–50.2	7.81–18.61	8.53–21.25
	N	323	323	323	323	323	149	149

Proximate levels shown as percent dry weight (% DW), except moisture which is shown as percent fresh weight (% FW)
Results significantly different ($p < 0.05$) are shown in bold italic type
[a] $N = 31$ due to a missing sample
[b] $N = 32$ except ash ($N = 31$) where one outlying value was omitted from statistical analysis and determination of the range
[c] $N = 192$

TABLE 8 Seed proximate composition: Across-location comparison of SYHT0H2 soybean treated with trait-specific herbicides (test + TSH) and nontransgenic soybean (control)

Data source	Statistic	Moisture	Protein	Fat	Ash	Carbohydrates	ADF	NDF
Test + TSH[a]	mean	8.80	38.4	20.6	5.17	35.9	14.6	16.4
	range	6.89–12.1	32.9–42.3	18.6–22.8	4.27–6.02	32.2–41.4	11.4–19.4	11.2–19.1
Control[b]	mean	8.70	38.2	20.7	5.25	35.7	14.8	16.7
	range	5.90–12.6	32.2–44.7	18.9–22.8	4.08–6.62	29.3–40.1	10.3–18.0	12.6–21.3
ANOVA (*t*-test) entry effect and standard error of means								
	p	0.429	0.642	0.294	0.200	0.716	0.591	0.451
	SEM	0.533	0.70	0.31	0.171, 0.171	0.56	0.40	0.35
Reference varieties[c]	mean	9.18	38.1	20.4	5.26	36.2	14.6	16.3
	range	6.10–14.30	30.6–44.4	15.8–25.0	4.14–6.59	25.2–43.8	8.20–20.6	11.2–21.9
ILSI (2010)	mean	10.1	39.47	16.681	5.320	38.2	11.97	12.33
	range	4.7–34.4	33.19–45.48	8.104–23.562	3.885–6.994	29.6–50.2	7.81–18.61	8.53–21.25
	N	323	323	323	323	323	149	149

Proximate levels shown as percent dry weight (% DW), except moisture which is shown as percent fresh weight (% FW)
Results significantly different ($p < 0.05$) are shown in bold italic type
[a] Treated with the trait-specific herbicides (TSH) mesotrione and glufosinate, $N = 32$
[b] $N = 32$ except ash ($N = 31$) where one outlying value was omitted from statistical analysis and determination of the range
[c] $N = 192$

TABLE 9 Seed mineral composition: Across-location comparison of SYHT0H2 soybean (test) and nontransgenic soybean (control)

Data source	Statistic	Ca	Fe	Mg	P	K
Test[a]	mean	3062	80.5	2433	6141	17261
	range	2380–3840	68.5–109	2100–2920	4300–8760	14000–21100
Control[b]	mean	2990	83.4	2391	6117	17747
	range	2280–3910	72.5–117	1970–3070	4000–9130	14000–24000
ANOVA (*t*-test) entry effect and standard error of means						
	p	0.165	***0.027***	0.079	0.719	***0.002***
	SEM	117.6, 117.5	2.74, 2.74	76.6, 76.6	379.6, 379.5	572.3, 571.9
Reference varieties[c]	mean	2897	72.5	2394	5910	17793
	range	2050–3860	48.0–110	1820–3090	4200–8570	13800–24700
ILSI (2010)	mean	2170.5	78.10	2635.8	7148.0	20613.7
	range	1165.5–3071.0	55.36–109.54	2194.0–3128.4	5067.4–9352.4	18680.1–23161.4
	N	80	80	80	80	80

Mineral levels shown as milligrams per kilogram dry weight (mg/kg DW)
Results significantly different ($p < 0.05$) are shown in bold italic type
[a] $N = 31$ except iron (($N = 30$) due to one missing sample and one outlying value that was omitted from statistical analysis and determination of the range
[b] $N = 32$ except iron ($N = 31$) where one value was an outlier and was omitted from statistical analysis and determination of the range
[c] $N = 192$

TABLE 10 Seed mineral composition: Across-location comparison of SYHT0H2 soybean treated with trait-specific herbicides (test + TSH) and nontransgenic soybean (control)

Data source	Statistic	Ca	Fe	Mg	P	K
Test + TSH[a]	mean	2924	79.9	2414	6182	17291
	range	2360–3380	64.3–100	2020–2910	4360–8440	13500–20500
Control[b]	mean	2990	83.4	2391	6117	17747
	range	2280–3910	72.5–117	1970–3070	4000–9130	14000–24000
ANOVA (*t*-test) entry effect and standard error of means						
	p	0.208	***0.010***	0.317	0.333	***0.004***
	SEM	117.5	2.73, 2.73	76.6	379.5	571.9
Reference varieties[c]	mean	2897	72.5	2394	5910	17793
	range	2050–3860	48.0–110	1820–3090	4200–8570	13800–24700
ILSI (2010)	mean	2170.5	78.10	2635.8	7148.0	20613.7
	range	1165.5–3071.0	55.36–109.54	2194.0–3128.4	5067.4–9352.4	18680.1–23161.4
	N	80	80	80	80	80

Mineral levels shown as milligrams per kilogram dry weight (mg/kg DW)
Results significantly different ($p < 0.05$) are shown in bold italic type
[a] Treated with the trait-specific herbicides (TSH) mesotrione and glufosinate, $N = 32$
[b] $N = 32$ except iron ($N = 31$) where one outlying value was omitted from statistical analysis and determination of the range
[c] $N = 192$

TABLE 11 Seed vitamin composition: Across-location comparison of SYHT0H2 soybean (test) and nontransgenic soybean (control)

Data Source	Statistic	Vitamin A[e] β-carotene	Vitamin B_1 Thiamine	Vitamin B_2 Riboflavin	Vitamin B_9 Folic Acid	Vitamin K_1 Phytonadione
Test[a]	mean	–	0.515	0.384	0.440	0.411
	range	<LOQ–0.135	0.277–0.749	0.280–0.521	0.251–0.631	0.181–0.724
Control[b]	mean	–	0.535	0.381	0.415	0.462
	range	<LOQ–0.208	0.332–0.756	0.288–0.546	0.234–0.552	0.143–0.827
ANOVA (*t*-test) entry effect and standard error of means						
	p	–	0.205	0.845	0.112	0.094
	SEM	–	0.0341, 0.0340	0.0142, 0.0141	0.0300, 0.0300	0.0456, 0.0455
Reference varieties[c]	mean	–	0.472	0.384	0.410	0.388
	range	<LOQ–0.104	0.253–1.02	0.270–0.532	0.224–0.680	0.106–0.886
ILSI (2010)[d]	mean		0.197	0.267	0.3589	
	range	ND	0.101-0.254	0.190-0.321	0.2386-0.4709	ND
	N		80	80	80	

Vitamin levels shown as milligrams per 100 grams dry weight (mg/100 g DW), except vitamin K_1 which is shown as parts per million (ppm)
Results significantly different ($p < 0.05$) are shown in bold italic type. Where some or all values were < LOQ, calculation of the mean and statistical comparison could not be performed so only the range is shown.
[a] $N = 31$ due to a missing sample
[b] $N = 32$
[c] $N = 192$
[d] ND indicates that no data were available
[e] The LOQ for β-carotene was 0.0213−0.0233 mg/100g DW

TABLE 12 Seed vitamin composition: Across-location comparison of SYHT0H2 soybean treated with trait-specific herbicides (test + TSH) and nontransgenic soybean (control)

Data source	Statistic	Vitamin A[e] β-carotene	Vitamin B_1 Thiamine	Vitamin B_2 Riboflavin	Vitamin B_9 Folic Acid	Vitamin K_1 Phytonadione
Transgenic + TSH[a]	mean	–	0.535	0.394	0.427	0.391
	range	<LOQ–0.257	0.324–0.762	0.300–0.513	0.249–0.568	0.139–0.730
Nontransgenic[b]	mean	–	0.535	0.381	0.415	0.462
	range	< LOQ–0.208	0.332–0.756	0.288–0.546	0.234–0.552	0.143–0.827
ANOVA (*t*-test) entry effect and standard error of means						
	p	–	0.998	0.378	0.426	***0.019***
	SEM	–	0.0340	0.0141	0.0300	0.0455
Reference varieties[c]	mean	–	0.472	0.384	0.410	0.388
	range	<LOQ–0.104	0.253–1.02	0.270–0.532	0.224–0.680	0.106–0.886
ILSI (2010)[d]	mean		0.197	0.267	0.3589	
	range	ND	0.101-0.254	0.190-0.321	0.2386-0.4709	ND
	N		80	80	80	

Vitamin levels shown as milligrams per 100 grams dry weight (mg/100 g DW), except vitamin K_1 which is shown as parts per million (ppm)
Results significantly different ($p < 0.05$) are shown in bold italic type. Where some or all values were < LOQ, calculation of the mean and statistical comparison could not be performed so only the range is shown.
[a] Treated with the trait-specific herbicides (TSH) mesotrione and glufosinate, $N = 32$
[b] $N = 32$
[c] $N = 192$
[d] ND indicates that no data were available
[e] The LOQ for β-carotene was 0.0213–0.0233 mg/100g DW

TABLE 13 Seed vitamin E composition: Across-location comparison of SYHT0H2 soybean (test) and nontransgenic soybean (control)

Data Source	Statistic	α-tocopherol	β-tocopherol	γ-tocopherol	δ-tocopherol	α-tocotrienol	β-tocotrienol	γ-tocotrienol	δ- tocotrienol
Test[a]	mean	0.0228	–	0.226	0.0789	–	–	–	–
	range	0.00996–0.0628	<LOQ	0.183–0.268	0.0518–0.107	<LOQ	<LOQ–0.549	<LOQ	<LOQ
Control[b]	mean	0.0258	–	0.201	0.0611	–	–	–	–
	range	0.00934–0.0605	<LOQ	0.154–0.244	0.0312–0.0845	<LOQ	<LOQ	<LOQ	<LOQ
ANOVA (*t*-test) entry effect and standard error of means									
	p	***0.019***	–	***<0.001***	***<0.001***	–	–	–	–
	SEM	0.00470, 0.00470	–	0.0059, 0.0059	0.00547, 0.00547	–	–	–	–
Reference varieties[c]	mean	0.0299	–	0.176	0.0678	–	–	–	–
	range	0.0115–0.0771	<LOQ–0.00779	0.127–0.236	0.0320–0.112	<LOQ	<LOQ	<LOQ	<LOQ
ILSI (2010)[d]	mean	0.0191							
	range	0.0019–0.0617	ND	ND	ND	ND	ND	ND	ND
	N	234							

Tocopherol and tocotrienol levels shown as milligrams per gram dry weight (mg/g DW); original units of mg/100 g reported by Covance Laboratories were converted to mg/g
Results significantly different ($p < 0.05$) are shown in bold italic type. Where some or all values were < LOQ, calculation of the mean and ANOVA could not be performed so only the range is shown. The LOQ for all tocopherols and tocotrienols was 0.0053–0.0058 mg/g DW.

[a] $N = 31$ due to a missing sample
[b] $N = 32$
[c] $N = 192$
[d] ND indicates that no data were available; for soybean, ILSI reports only vitamin E and not the levels of individual isoforms

TABLE 14 Seed vitamin E composition: Across-location comparison of SYHT0H2 soybean treated with trait-specific herbicides (test + TSH) and nontransgenic soybean (control)

Data source	Statistic	α-tocopherol	β-tocopherol	γ-tocopherol	δ-tocopherol	α-tocotrienol	β-tocotrienol	γ-tocotrienol	δ-tocotrienol
Test + TSH[a]	mean	0.0241	–	0.214	0.0760	–	–	–	–
	range	0.0102–0.0552	<LOQ	0.163–0.261	0.0416–0.107	<LOQ	<LOQ–0.628	<LOQ	<LOQ
Control[b]	mean	0.0258	–	0.201	0.0611	–	–	–	–
	range	0.00934–0.0605	<LOQ	0.154–0.244	0.0312–0.0845	<LOQ	<LOQ	<LOQ	<LOQ
ANOVA (*t*-test) entry effect and standard error of means									
	p	0.145	–	***0.004***	***<0.001***	–	–	–	–
	SEM	0.00470	–	0.0059	0.00547	–	–	–	–
Reference varieties[c]	mean	0.0299	–	0.176	0.0678	–	–	–	–
	range	0.0115–0.0771	<LOQ–0.00779	0.127–0.236	0.0320–0.112	<LOQ	<LOQ	<LOQ	<LOQ
ILSI (2010)[d]	mean	0.0191							
	range	0.0019–0.0617	ND	ND	ND	ND	ND	ND	ND
	N	234							

Tocopherol and tocotrienol levels shown as milligrams per gram dry weight (mg/g DW); original units of mg/100 g reported by Covance Laboratories were converted to mg/g Results significantly different ($p < 0.05$) are shown in bold italic type. Where some or all values were < LOQ, calculation of the mean and ANOVA could not be performed so only the range is shown. The LOQ for all tocopherols and tocotrienols was 0.0053–0.0058 mg/g DW.

[a] Treated with the trait-specific herbicides (TSH) mesotrione and glufosinate, $N = 32$

[b] $N = 32$

[c] $N = 192$

[d] ND indicates that no data were available; for soybean, ILSI reports only vitamin E and not the levels of individual isoforms

TABLE 15 Seed amino acid composition: Across-location comparison of SYHT0H2 soybean (test) and nontransgenic soybean (control)

Data source	Statistic	Asp	Thr	Ser	Glu	Pro	Gly	Ala	Cys	Val
Test[a]	mean	44.1	15.7	19.4	66.2	19.6	16.9	17.3	5.73	19.0
	range	36.1–48.5	13.6–16.5	16.3–21.2	52.7–74.5	15.7–21.6	14.3–18.0	14.7–18.7	5.01–6.55	15.4–20.5
Control[b]	mean	43.2	15.4	19.0	64.8	19.0	16.6	17.0	5.73	18.7
	range	36.7–47.3	13.5–16.6	16.4–20.8	52.9–72.6	16.1–21.2	14.5–18.0	14.7–18.4	4.99–6.45	16.1–20.2
ANOVA (*t*-test) entry effect and standard error of means										
	p	***0.013***	***0.021***	***0.048***	***0.046***	***0.002***	0.077	***0.014***	0.995	0.117
	SEM	0.82, 0.82	0.19, 0.19	0.32, 0.32	1.48, 1.48	0.38, 0.38	0.25, 0.25	0.23, 0.23	0.121, 0.121	0.31, 0.31
Reference varieties[c]	mean	43.1	15.3	18.8	66.2	19.4	16.4	17.0	5.82	18.4
	range	34.8–49.6	12.9–16.7	15.3–21.6	50.5–78.3	15.4–22.6	13.8–18.5	14.4–18.5	4.79–7.36	15.0–20.6
ILSI (2010)	mean	44.93	14.73	20.19	70.88	20.01	16.88	17.16	5.87	19.10
	range	38.08–51.22	11.39–18.62	11.06–24.84	58.43–82.01	16.87–22.84	14.58–19.97	15.13–21.04	3.70– 8.08	15.97–22.04
	N	234	234	234	234	234	234	234	234	234

Amino acid levels shown as milligrams per gram dry weight (mg/g DW)

(continued)

Results significantly different ($p < 0.05$) are shown in bold italic type

[a] $N = 31$ due to a missing sample

[b] $N = 32$

[c] $N = 192$

Table 15 Seed amino acid composition: Across-location comparison of SYHT0H2 soybean (test) and nontransgenic soybean (control) (*continued)*

Data source	Statistic	Met	Ile	Leu	Tyr	Phe	Lys	His	Arg	Trp
Test[a]	mean	5.18	18.6	29.6	15.1	19.9	24.6	10.4	28.7	5.72
	range	4.51–5.93	15.4–20.3	24.1–32.4	12.8–16.4	15.9–21.7	21.1–26.4	8.79–11.3	22.4–31.9	4.98–6.20
Control[b]	mean	5.13	18.4	29.0	14.9	19.4	23.7	10.2	27.8	5.69
	range	4.53–5.68	15.8–20.1	24.9–31.5	13.0–16.0	16.0–21.3	21.2–25.7	8.56–11.1	22.8–31.5	5.04–6.33
ANOVA (*t*-test) entry effect and standard error of means										
	p	0.488	0.159	***0.011***	***0.035***	***0.010***	***<0.001***	***0.007***	***0.005***	0.657
	SEM	0.072	0.31	0.53	0.22	0.40	0.35	0.14	0.64	0.074
		0.071	0.31	0.53	0.22	0.40	0.35	0.14	0.64	0.073
Reference varieties[c]	mean	5.37	18.2	28.7	14.7	19.3	24.5	10.0	28.3	5.67
	range	4.22–6.19	14.9–20.7	23.3–32.2	12.3–16.4	15.5–21.7	19.8–27.4	8.05–11.1	21.9–33.0	4.88–6.20
ILSI (2010)	mean	5.51	18.08	30.39	13.21	19.79	25.57	10.40	28.40	4.329
	range	4.31–6.81	15.39–20.77	25.90–36.22	10.16–16.13	16.32–23.46	22.85–28.39	8.78–11.75	22.85–34.00	3.563–5.016
	N	234	234	234	234	234	234	234	234	234

Amino acid levels shown as milligrams per gram dry weight (mg/g DW)
Results significantly different ($p < 0.05$) are shown in bold italic type
[a] $N = 31$ due to a missing sample
[b] $N = 32$
[c] $N = 192$

TABLE 16 Seed amino acid composition: Across-location comparison of SYHT0H2 soybean treated with trait-specific herbicides (test + TSH) and nontransgenic soybean (control)

Data source	Statistic	Asp	Thr	Ser	Glu	Pro	Gly	Ala	Cys	Val
Test + TSH[a]	mean	44.1	15.6	19.3	66.4	19.5	16.9	17.2	5.82	19.0
	range	37.8–50.3	14.0–16.6	16.7–21.6	55.2–76.1	17.1–21.4	14.8–18.4	15.4–18.6	4.95–6.54	16.7–21.0
Control[b]	mean	43.2	15.4	19.0	64.8	19.0	16.6	17.0	5.73	18.7
	range	36.7–47.3	13.5–16.6	16.4–20.8	52.9–72.6	16.1–21.2	14.5–18.0	14.7–18.4	4.99–6.45	16.1–20.2
ANOVA (*t*-test) entry effect and standard error of means										
	p	***0.016***	0.093	0.071	***0.030***	***0.008***	0.059	0.085	0.240	0.081
	SEM	0.82	0.19	0.32	1.48	0.38	0.25	0.23	0.121	0.31
Reference varieties[c]	mean	43.1	15.3	18.8	66.2	19.4	16.4	17.0	5.82	18.4
	range	34.8–49.6	12.9–16.7	15.3–21.6	50.5–78.3	15.4–22.6	13.8–18.5	14.4–18.5	4.79–7.36	15.0–20.6
ILSI (2010)	mean	44.93	14.73	20.19	70.88	20.01	16.88	17.16	5.87	19.10
	range	38.08–51.22	11.39–18.62	11.06–24.84	58.43–82.01	16.87–22.84	14.58–19.97	15.13–21.04	3.70– 8.08	15.97–22.04
	N	234	234	234	234	234	234	234	234	234

Amino acid levels shown as milligrams per gram dry weight (mg/g DW)

(continued)

Results significantly different ($p < 0.05$) are shown in bold italic type

[a] Treated with the trait-specific herbicides (TSH) mesotrione and glufosinate, $N = 32$

[b] $N = 32$

[c] $N = 192$

TABLE 16 Seed amino acid composition: Across-location comparison of SYHT0H2 soybean treated with trait-specific herbicides (test + TSH) and nontransgenic soybean (control) *(continued)*

Data source	Statistic	Met	Ile	Leu	Tyr	Phe	Lys	His	Arg	Trp
Test + TSH[a]	mean	5.31	18.7	29.5	15.1	19.8	24.6	10.4	28.6	5.73
	range	4.73–5.84	16.3–20.6	25.5–32.1	13.4–16.2	16.8–21.6	21.0–26.8	8.78–11.1	23.7–32.4	5.18–6.13
Control[b]	mean	5.13	18.4	29.0	14.9	19.4	23.7	10.2	27.8	5.69
	range	4.53–5.68	15.8–20.1	24.9–31.5	13.0–16.0	16.0–21.3	21.2–25.7	8.56–11.1	22.8–31.5	5.04–6.33
ANOVA (*t*-test) entry effect and standard error of means										
	p	***0.011***	0.144	***0.031***	0.071	***0.017***	***<0.001***	***0.034***	***0.008***	0.536
	SEM	0.071	0.31	0.53	0.22	0.40	0.35	0.14	0.64	0.073
Reference varieties[c]	mean	5.37	18.2	28.7	14.7	19.3	24.5	10.0	28.3	5.67
	range	4.22–6.19	14.9–20.7	23.3–32.2	12.3–16.4	15.5–21.7	19.8–27.4	8.05–11.1	21.9–33.0	4.88–6.20
ILSI (2010)	mean	5.51	18.08	30.39	13.21	19.79	25.57	10.40	28.40	4.329
	range	4.31–6.81	15.39–20.77	25.90–36.22	10.16–16.13	16.32–23.46	22.85–28.39	8.78–11.75	22.85–34.00	3.563–5.016
	N	234	234	234	234	234	234	234	234	234

Amino acid levels shown as milligrams per gram dry weight (mg/g DW)
Results significantly different ($p < 0.05$) are shown in bold italic type
[a] Treated with the trait-specific herbicides (TSH) mesotrione and glufosinate, $N = 32$
[b] $N = 32$
[c] $N = 192$

TABLE 17 Seed fatty acid composition: Across-location comparison of SYHT0H2 soybean (test) and nontransgenic soybean (control)

Data source	Statistic	16:0 Palmitic	17:0 Heptadecanoic	18:0 Stearic	18:1 Oleic	18:2 Linoleic	18:3 Linolenic	20:0 Arachidic	20:1 Eicosenoic	22:0 Behenic
Test[a]	mean	10.5	–	4.67	24.3	52.2	7.35	0.368	0.183	0.372
	range	10.2–11.0	<LOQ–0.122	4.08–5.62	21.5–29.5	47.5–54.4	5.88–9.03	0.320–0.454	0.150–0.234	0.345–0.431
Control[a]	mean	10.0	–	4.50	23.0	54.1	7.51	0.347	0.181	0.357
	range	9.61–10.5	<LOQ–0.121	4.01–5.40	20.1–26.3	50.7–56.3	6.37–8.99	0.305–0.433	0.148–0.240	0.323–0.430
ANOVA (*t*-test) entry effect and standard error of means										
	p	***<0.001***	–	***0.001***	***0.004***	***<0.001***	***<0.001***	***<0.001***	0.444	***0.001***
	SEM	0.08, 0.08	–	0.144, 0.144	0.69, 0.68	0.56, 0.56	0.266, 0.266	0.0136, 0.0136	0.0077, 0.0076	0.0087, 0.0087
Reference varieties[c]	mean	10.8	–	4.57	24.1	52.2	7.44	0.368	0.199	0.364
	range	8.93–12.2	<LOQ–0.127	3.75–6.32	18.1–35.2	45.0–56.7	5.30–10.1	0.288–0.534	0.153–0.286	0.304–0.498
ILSI (2010)	mean	11.12	0.114	4.01	20.7	53.3	8.34	0.323	0.204	0.402
	range	9.55– 15.77	<LOQ–0.146	2.70– 5.88	14.3–32.2	42.3–58.8	3.00–12.52	<LOQ–0.482	<LOQ–0.350	0.277– 0.595
	N[d]	234	97	234	234	234	234	233	221	233

Fatty acids shown as % of total fatty acids

Results significantly different ($p < 0.05$) are shown in bold italic type. Where some or all values were < LOQ, calculation of the mean and ANOVA could not be performed so only the range is shown. Levels < LOQ were observed for all replicates at all locations for 8:0 caprylic, 10:0 capric, 12:0 lauric, 14:0 myristic, 14:1 myristoleic, 15:0 pentadecanoic, 15:1 pentadecenoic, 16:1 palmitoleic, 17:1 heptadecenoic, 18:3 gamma linolenic, 20:2 eicosadienoic, 20:3 eicosatrienoic, and 20:4 arachidonic fatty acids

[a] $N = 31$ due to a missing sample

[b] $N = 32$

[c] $N = 192$

[d] N is the number of ILSI values used to calculate the mean and excludes values < LOQ

TABLE 18 Seed fatty acid composition: Across-location comparison of SYHT0H2 soybean treated with trait-specific herbicides (test + TSH) and nontransgenic soybean (control)

Data source	Statistic	16:0 Palmitic	17:0 Heptadecanoic	18:0 Stearic	18:1 Oleic	18:2 Linoleic	18:3 Linolenic	20:0 Arachidic	20:1 Eicosenoic	22:0 Behenic
Test + TSH[a]	mean	10.6	–	4.70	24.6	51.8	7.43	0.373	0.182	0.373
	range	10.0–11.2	<LOQ–0.120	4.14–5.39	21.0–29.8	48.1–54.5	6.12–8.93	0.313–0.449	0.148–0.219	0.336–0.427
Control[b]	mean	10.0	–	4.50	23.0	54.1	7.51	0.347	0.181	0.357
	range	9.61–10.5	<LOQ–0.121	4.01–5.40	20.1–26.3	50.7–56.3	6.37–8.99	0.305–0.433	0.148–0.240	0.323–0.430
ANOVA (*t*-test) entry effect and standard error of means										
	p	***<0.001***	–	***<0.001***	***0.001***	***<0.001***	0.061	***<0.001***	0.733	***0.001***
	SEM	0.08	–	0.144	0.68	0.56	0.266	0.0136	0.0076	0.0087
Reference varieties[c]	mean	10.8	–	4.57	24.1	52.2	7.44	0.368	0.199	0.364
	range	8.93–12.2	<LOQ–0.127	3.75–6.32	18.1–35.2	45.0–56.7	5.30–10.1	0.288–0.534	0.153–0.286	0.304–0.498
ILSI (2010)	mean	11.12	0.114	4.01	20.7	53.3	8.34	0.323	0.204	0.402
	range	9.55– 15.77	<LOQ–0.146	2.70– 5.88	14.3–32.2	42.3–58.8	3.00–12.52	<LOQ–0.482	<LOQ–0.350	0.277– 0.595
	N[d]	234	97	234	234	234	234	233	221	233

Fatty acids shown as % of total fatty acids

Results significantly different ($p < 0.05$) are shown in bold italic type. Where some or all values were < LOQ, calculation of the mean and ANOVA could not be performed so only the range is shown. Levels < LOQ were observed for all replicates at all locations for 8:0 caprylic, 10:0 capric, 12:0 lauric, 14:0 myristic, 14:1 myristoleic, 15:0 pentadecanoic, 15:1 pentadecenoic, 16:1 palmitoleic, 17:1 heptadecenoic, 18:3 gamma linolenic, 20:2 eicosadienoic, 20:3 eicosatrienoic, and 20:4 arachidonic fatty acids

[a] Treated with the trait-specific herbicides (TSH) mesotrione and glufosinate, $N = 32$

[b] $N = 32$

[c] $N = 192$

[d] N is the number of ILSI values used to calculate the mean and excludes values < LOQ

TABLE 19 Seed anti-nutrient composition: Across-location comparison of SYHT0H2 soybean (test) and nontransgenic soybean (control)

Data source	Statistic	Daidzein (µg/g DW)	Glycitein (µg/g DW)	Genistein (µg/g DW)	Lectin (HU/mg DW)	Phytic acid (% DW)	Raffinose (% DW)	Stachyose (% DW)	Trypsin inhibitor (TIU/mg DW)
Test[a]	mean	391	181	569	26.1	1.38	0.816	3.76	35.9
	range	117–670	103–258	121–1020	12.3–46.5	0.819–2.14	0.576–1.13	3.13–4.25	21.8–55.1
Control[b]	mean	375	196	556	25.8	1.41	0.801	3.72	34.4
	range	136–624	122–284	190–974	8.07–56.1	0.780–2.35	0.511–1.18	2.93–4.03	23.7–61.9
ANOVA (*t*-test) entry effect and standard error of means									
	p	0.273	0.138	0.548	0.924	0.259	0.303	0.562	0.397
	SEM	46.5, 46.5	10.3, 10.3	80.4, 80.4	2.18, 2.15	0.114, 0.114	0.0503, 0.0503	0.099, 0.099	1.64, 1.62
Reference varieties[c]	mean	702	124	710	20.2	1.311	0.951	4.32	37.4
	range	229–1230	58.8–265	165–1240	4.19–61.3	0.766–2.21	0.607–1.58	3.15–5.13	18.9–68.3
ILSI (2010)	mean	834.8	156.6	976.8	1.718	1.121	0.355	2.19	48.33
	range	60.0–2453.5	<LOQ–310.0	144.3–2837.2	0.105–9.038	0.634–1.960	0.212–0.661	1.21–3.50	19.59–118.68
	N[d]	251	248	251	251	118	118	118	178

Units for anti-nutrients are shown in column headings: dry weight (DW), hemagglutinating unit (HU), trypsin inhibitor unit (TIU), microgram (µg), milligram (mg), gram (g)
Results significantly different ($p < 0.05$) are shown in bold italic type
[a] $N = 31$ due to a missing sample
[b] $N = 32$
[c] $N = 192$
[d] N is the number of ILSI values used to calculate the mean and excludes values < LOQ

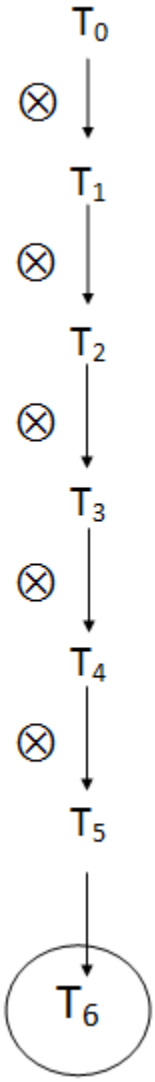
TABLE 20 Seed anti-nutrient composition: Across-location comparison of SYHT0H2 soybean treated with trait-specific herbicides (test + TSH) and nontransgenic soybean (control)

Data source	Statistic	Daidzein (µg/g DW)	Glycitein (µg/g DW)	Genistein (µg/g DW)	Lectin (HU/mg DW)	Phytic acid (% DW)	Raffinose (% DW)	Stachyose (% DW)	Trypsin inhibitor (TIU/mg DW)
Test + TSH[a]	mean	396	193	548	26.6	1.40	0.805	3.72	33.4
	range	158–660	128–340	168–1100	8.31–53.7	0.813–2.13	0.616–1.12	2.72–4.06	22.3–54.9
Control[b]	mean	375	196	556	25.8	1.41	0.801	3.72	34.4
	range	136–624	122–284	190–974	8.07–56.1	0.780–2.35	0.511–1.18	2.93–4.03	23.7–61.9
ANOVA (*t*-test) entry effect and standard error of means									
	p	0.147	0.760	0.669	0.783	0.826	0.770	0.931	0.541
	SEM	46.5	10.3	80.4	2.15	0.114	0.0503	0.099	1.62
Reference varieties[c]	mean	702	124	710	20.2	1.311	0.951	4.32	37.4
	range	229–1230	58.8–265	165–1240	4.19–61.3	0.766–2.21	0.607–1.58	3.15–5.13	18.9–68.3
ILSI (2010)	mean	834.8	156.6	976.8	1.718	1.121	0.355	2.19	48.33
	range	60.0–2453.5	<LOQ–310.0	144.3–2837.2	0.105–9.038	0.634–1.960	0.212–0.661	1.21–3.50	19.59–118.68
	N[d]	251	248	251	251	118	118	118	178

Units for anti-nutrients are shown in column headings: dry weight (DW), hemagglutinating unit (HU), trypsin inhibitor unit (TIU), microgram (µg), milligram (mg), gram (g)
Results significantly different ($p < 0.05$) are shown in bold italic type
[a] Treated with the trait-specific herbicides (TSH) mesotrione and glufosinate, $N = 32$
[b] $N = 32$
[c] $N = 192$
[d] N is the number of ILSI values used to calculate the mean and excludes values < LOQ

APPENDICES

APPENDIX A Pedigree Chart of Event SYHT0H2 Soybean



The transformation recipient line is 'Jack'

T_0 = original transformant
⊗ self pollination
The T6 generation seed of SYHT0H2 soybean was used as the test substance in study TK0027507.

APPENDIX B Field Trial Summary Report

Field Trial Summary Report for Production of Composition Samples
Prepared by: Dave Roberts, Traits Field Program, Operator and Consumer Safety, Product Safety Syngenta Crop Protection, LLC

Study Number: TK0027507
USDA Notification Number: 10-064-116n

I. TEST SUBSTANCES

Entry ID[a]	Seed Identification	Material Identification
E01	Control	10SG900904
E02[a]	Test 1	10SG900901
E03[a]	Test 1 + trait specific herbicides	10SG900901
E06	Test 2	10SG900903
E07	Test 2 + trait specific herbicides	10SG900903
E08	Reference 1	10SG900905
E09	Reference 2	10SG900906
E10	Reference 3	10SG900907
E11	Reference 4	10SG900908
E12	Reference 5	10SG900909
E13	Reference 6	10SG900910

[a] Other entries not evaluated in this assessment were also grown

II. TRIAL LOCATION DETAILS

Location Code	Field Trial Number	Location	Site Code
L01	10ACR017-27507L01	Richland, IA	R017
L02	10ACR049-27507L02	York, NE	R049
L03	10ACR028-27507L03	Fisk, MO	R028
L04	10ACR069-27507L04	Stewardson, IL	R069
L07	10ACR035-27507L07	Mebane, NC	R035
L08	10ACR056-27507L08	Hamburg, PA	R056
L09	10ACR067-27507L09	Carlyle, IL	R067
L10	10ACR068-27507L10	Rockville, IN	R068

III. FIELD TRIAL PERSONNEL

Location Code and Trial Site Location (State, County, City)	Contact Person and Address	Other Contributing Personnel
L01 (Iowa, Jefferson, Richland)	David Bennett Bennett AG Research Corp. 1109 Ivy Ave. Richland, IA 52585	Laurie Bennett Roger Johnson Dennis Tonks Brent Pacha
L02 (Nebraska, York, York)	Gregory Bures Midwest Research Inc. 910 Road 15 York, NE 68467	Jess Spotanski Stacy Gieck Dannielle Bures
L03 (Missouri, Butler, Fisk)	Nathan Goldschmidt Shoffner Farm Research, Inc. 4809 Hwy FF Fisk, MO 63940	Bryan Schmid Mike Clubb
L04 (Illinois, Shelby, Windsor)	Gary Schultz SynTech Research RR1 Box 87 Stewardson, IL 62463	Seth L. Waggoner Johnna L. Schultz
L07 (N. Carolina, Orange, Mebane)	Volnei Rekowsky Eurofins Agroscience Services, Inc 8909 Atkins Rd Mebane, NC 27302	Lisa Darmo Joe Douglas
L08 (Pennsylvania, Berks, Hamburg)	Elijah Meck LABServices 342 S. Third St Hamburg, PA 19526	Timothy Dutt, Brian Mohn, Mason Pickel, Devendra Andiuppan, Andrew Master, Michelle Meck, James Steffel, Danna Landis
L09 (Illinois, Clinton, Carlyle)	Tim Boeker SGS North America 19300 Marydale Road Carlyle, IL 62231	Kevin Schwarz, Deb Fuhler Tracy Knerrer, Steven Bauer Rick Bergmann, Kevin Foppe Tom Fromme
L10 (Indiana, Parke, Rockville)	Wayne Tucker SGS North America 1365 N Seip Road Rockville, IN 47872	Bill Ray Stephanie Troy Devin Oxford Kevin Oxford

IV. TRIAL LAYOUT/TEST SYSTEM

Test system: Soybean
Experimental design: Randomized complete block with 4 replications
Number of plots: 44 plots

Constituents of each plot

Length: 15 feet (4.6 m)
Row spacing: approximately 30 inches (76 cm)
Number of rows: 6
Planting rate (seeds/row): approximately 105

V. SOIL CHARACTERIZATION, FIELD PREPARATION, AND PLANTING DATE

Location Code	Soil Type (USDA)	Previous Crop (1 yr)	Field Preparation		Fertilization		Planting date
			Date	Method	Date	Type	
L01	Silt Loam	Grain Sorghum	27-May-10 28-May-10	field cultivator Culti-mulch	1-Apr-10	7-32-205 (N-P-K)	25-Jun-10
L02	Silt Loam	Soybean	04-May-10 24-May-10 10-Jun-10	disc field cultivator field cultivator	–	–	11-Jun-10
L03	Sandy loam	Rice	11-Apr-10 14-Apr-10 16-Apr-10 21-Apr-10	disc disc landplane bedder	11-Apr-10	0-0-60 (N-P-K)	21-Jun-10
L04	Loam	Corn	2-Jul-10	disc	–	–	2-Jul-10
L07	Sand	Corn	20-May-10 21-Jun-10 21-Jun-10 16-Jul-10	chisel plow disc finish cultivator field cultivator	21-Jun-10	4-12-24-2 (N-P-K-S)	22-Jun-10
L08	Loam	Tomato, Potato, Sweet Corn	25-May-10 7-Jun-10 18-Jun-10	chisel plow disc field cultivator	18-Jun-10	10-20-20 (N-P-K)	18-Jun-10
L09	Silt Loam	Milo	17-Apr-10 28-Apr-10 29-Apr-10	disc rotera rotera	27-Apr-10	0-0-60 (N-P-K)	24-Jun-10
L10	Silt Loam	corn	6-Apr-10 22-Apr-10 9-Jun-10 26-Jun-10 27-Jun-10	chisel plow disc disc field cultivator field cultivator	23-Apr-10	9-23-30 (N-P-K)	27-Jun-10

VI. PESTICIDE APPLICATIONS

Maintenance Pesticides Used

Location Code	Maintenance Pesticides			
	Purpose[a]	active ingredient (ai)	Date Applied	Rate (kg ai/Ha)
L01	H	*s*-metolachlor	29-May-10	1.39
	H	metribuzin	29-May-10	0.42
	H	imazethapyr	10-Jul-10	0.07
	H	fomesafen	10-Jul-10	0.39
L02	H	chlorimuron ethyl	11-Jun-10	0.01
	H	*s*-metolachlor	11-Jun-10	1.42
L03	H	glyphosate	18-May-10	1.12
	H	clethodim	25-Jun-10	0.14
	H	bentazon	28-Jun-10	1.12
	H	metolachlor	28-Jun-10	1.09
	H	fomesafen	28-Jun-10	0.26
	H	clethodim	30-Jul-10	0.20
	H	fomesafen	24-Aug-10	0.40
	I	lambda-cyhalothrin	24-Aug-10	0.02
	I	indoxacarb	24-Aug-10	0.07
L04	H	*s*- metolachlor & fomesafen	4-Jul-10	1.48
	I	lambda-cyhalothrin	21-Sep-10	0.03
L07	H	glyphosate	17-Jun-10	2.24
	H	s-metolachlor	22-Jun-10	1.07
L08	H	*s*-metolachlor	21-Jun-10	1.61
	H	bentazon	5-Jul-10	0.84
	H	bentazon	20-Jul-10	1.12
	F	chlorothalonil	7-Aug-10	1.85
L09	H	sulfentrazone & chloransulam-methyl	24-Jun-10	0.02
	H	*s*-metolachlor	24-Jun-10	1.12
	F	chlethodim	27-Jul-10	1.01
L10	H	imazethapyr & pendimethalin	28-Jun-10	0.97
	H	pendimethalin	28-Jun-10	0.45

[a] H (herbicide); I (insecticide); F (fungicide)

Trait-specific Herbicides Used

Location Code	Entry	Crop Growth Stage [a]	mesotrione		glufosinate		AMS[b]
			Date Applied	Rate (kg ai/Ha)	Date Applied	Rate (kg ai/Ha)	Rate (g ai/L)
L01	E07	V3	15-Jul-10	0.11	15-Jul-10	0.45	10
L02	E07	V4	11-Jul-10	0.11	11-Jul-10	0.45	10
L03	E07	V4	17-Jul-10	0.11	17-Jul-10	0.45	8
L04	E07	V3	27-Jul-10	0.11	27-Jul-10	0.45	18
L07	E07	V4	22-Jul-10	0.11	22-Jul-10	0.45	10
L08	E07	V4	17-Jul-10	0.11	17-Jul-10	0.45	10
L09	E07	V4	21-Jul-10	0.11	21-Jul-10	0.45	10
L10	E07	V4	27-Jul-10	0.11	27-Jul-10	0.45	10

[a] As described in: Pederson, P. 2009. *Soybean Growth and Development*. PM 1945. Ames, IA: Iowa State University, University Extension. 28pp.

[b] Ammonium sulfate (AMS) spray adjuvant included. Rate is grams of AMS active ingredient equivalence per liter of final spray solution.

VII. ECOLOGICAL STRESS EVALUATION

Location Code	Ecological Stress Summary
L01	Minimal stress from insects, disease and abiotic stressors.
L02	No stress from insects, disease or abiotic stressors.
L03	Minimal to mild stress from insects; no disease stress; minimal abiotic stressors.
L04	Minimal stress from insects; no disease or abiotic stressors.
L07	No stress from insects and disease; mild abiotic stressors.
L08	Minimal stress from insects, mild disease stress; mild to moderate abiotic stressors.
L09	Minimal stress from insects and disease; minimal to mild abiotic stressors.
L10	Minimal stress from insects, disease and abiotic sources.

VIII. SAMPLE COLLECTION AND SHIPPING CONDITIONS

Forage Samples

Location Code	Date of Sampling	Crop Growth Stage	Chilled ≤ 30 min. of harvest?	Maintained frozen[a] until shipment?	Shipping Date	Shipped frozen?
L01	13-Sep-10	R6	yes	yes	16-Sep-10	yes
L02	8-Sep-10	R6	yes	yes	8-Sep-10	yes
L03	14-Sep-10	R6	yes	yes	24-Sep-10	yes
L04	17-Sep-10	R6	yes	yes	5-Oct-10	yes
L07	16-Sep-10	R6	yes	yes	22-Sep-10	yes
L08	6-8-Sep-10	R6	yes	yes	10-Nov-10	yes
L09	7-Sep-10	R6	yes	yes	14-Sep-10	yes
L10	3-Sep-10	R6	yes	yes	1-Oct-10	yes

[a] At approximately -20 °C within 2 hours of sampling.

Seed Samples

Location Code	Date of Sampling	Crop Growth Stage	Storage Conditions	Shipping Date	Shipping Conditions
L01	22-Oct-10	R8	ambient	26-Oct-10	ambient
L02	21-Oct-10	R8	ambient	3-Nov-10	ambient
L03	7-Oct-10	R8	ambient	12-Oct-10	ambient
L04	11-Oct-10	R8	ambient	12-Oct-10	ambient
L07	18-Oct-10	R8	ambient	28-Oct-10	ambient
L08	3-Nov-10 8,9-Nov-10	R8	ambient	17-Nov-10	ambient
L09	7-Oct-10	R8	ambient	12-Oct-10	ambient
L10	7-Oct-10	R8	ambient	13-Oct-10	ambient

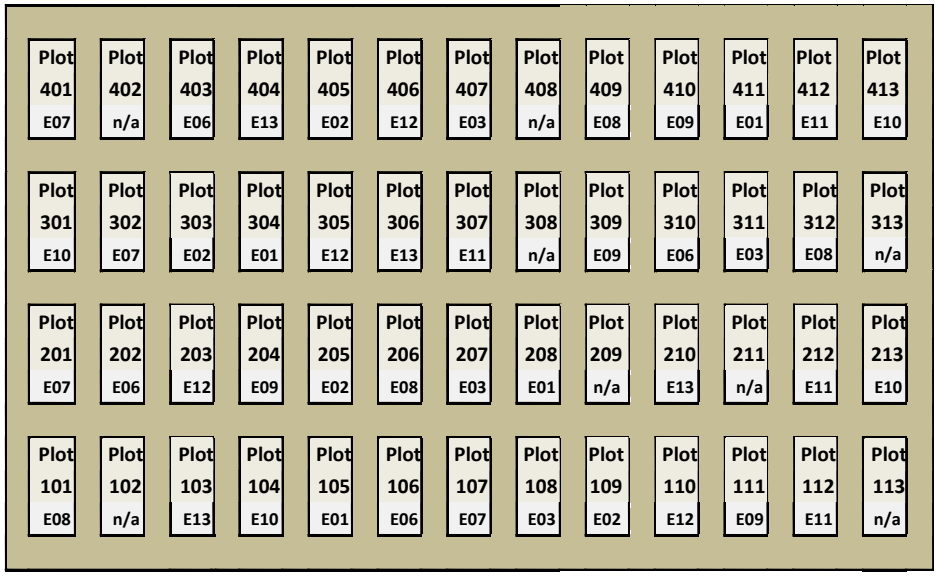
IX. WEATHER SUMMARY/IRRIGATION

Location Code	Weather Period (2010)	Mean Minimum Air Temp. (°C)	Mean Maximum Air Temp. (°C)	Total Rainfall (cm)
L01	June	18	29	37.08
	July	24	26	17.32
	August	19	30	21.06
	September	13	24	23.52
	October	6	21	5.18
L02	June	17	29	20.62+
	July	19	29	12.04+
	August	18	31	4.95+
	September	12	27	5.26+
	October	5	22	1.09
L03	June	23	34	0.18+
	July	23	34	8.41+
	August	23	36	4.24+
	September	18	31	5.72+
	October	11	27	3.43
L04	July	20	32	13.51
	August	19	32	3.56
	September	13	27	12.04
	October	6	22	1.68
L07	June	21	32	5.44+
	July	21	33	7.65+
	August	21	32	3.89
	September	17	31	15.44+
	October	9	24	8.13
L08	June	16	29	6.25
	July	18	32	16.99+
	August	17	29	8.99
	September	12	27	30.91
	October	6	18	17.65
	November	0	12	7.26
L09	June	21	31	16.8
	July	22	32	11.9
	August	20	33	8.9
	September	14	27	7.6
	October	7	23	1.5
L10	June	19	29	25.48
	July	19	30	12.34
	August	18	31	1.83
	September	13	27	2.62
	October	6	21	1.73

[a] irrigation applied indicated by '+'.

X. ENTRY RANDOMIZATIONS

Example Field Diagram (for L01)



”n/a” denotes plots not utilized

Location Code	Entry ID	Material ID	Plot No.			
L01	E01	10SG900904	105	208	304	411
	E02	10SG900901	109	205	303	405
	E03	10SG900901	108	207	311	407
	E06	10SG900903	106	202	310	403
	E07	10SG900903	107	201	302	401
	E08	10SG900905	101	206	312	409
	E09	10SG900906	111	204	309	410
	E10	10SG900907	104	213	301	413
	E11	10SG900908	112	212	307	412
	E12	10SG900909	110	203	305	406
	E13	10SG900910	103	210	306	404
L02	E01	10SG900904	108	205	305	407
	E02	10SG900901	105	207	307	401
	E03	10SG900901	113	204	313	404
	E06	10SG900903	110	202	306	410
	E07	10SG900903	112	206	301	409
	E08	10SG900905	111	213	302	405
	E09	10SG900906	103	201	312	402
	E10	10SG900907	109	209	310	403
	E11	10SG900908	104	203	311	406
	E12	10SG900909	101	210	304	408
	E13	10SG900910	102	211	309	412

(continued)

X. ENTRY RANDOMIZATIONS *(Continued)*

Location Code	Entry ID	Material ID	Plot No.			
L03	E01	10SG900904	109	210	311	410
	E02	10SG900901	107	203	304	407
	E03	10SG900901	103	205	306	401
	E06	10SG900903	108	206	305	408
	E07	10SG900903	113	212	312	403
	E08	10SG900905	112	208	313	405
	E09	10SG900906	111	213	301	411
	E10	10SG900907	102	201	309	404
	E11	10SG900908	106	202	303	409
	E12	10SG900909	110	204	302	413
	E13	10SG900910	101	209	310	402
L04	E01	10SG900904	102	209	303	413
	E02	10SG900901	105	210	313	405
	E03	10SG900901	110	201	310	410
	E06	10SG900903	111	205	301	406
	E07	10SG900903	107	211	302	404
	E08	10SG900905	103	204	308	412
	E09	10SG900906	113	207	312	403
	E10	10SG900907	109	213	307	411
	E11	10SG900908	108	212	311	409
	E12	10SG900909	106	206	305	407
	E13	10SG900910	101	203	304	402
L07	E01	10SG900904	105	213	301	411
	E02	10SG900901	111	210	310	406
	E03	10SG900901	113	204	304	405
	E06	10SG900903	106	208	312	408
	E07	10SG900903	107	205	306	401
	E08	10SG900905	112	207	313	413
	E09	10SG900906	110	212	308	410
	E10	10SG900907	108	203	309	402
	E11	10SG900908	104	211	307	407
	E12	10SG900909	109	201	302	403
	E13	10SG900910	101	202	311	404

(continued)

X. ENTRY RANDOMIZATIONS (*Continued*)

Location Code	Entry ID	Material ID	Plot No.			
L08	E01	10SG900904	102	210	308	412
	E02	10SG900901	112	202	313	404
	E03	10SG900901	104	207	305	405
	E06	10SG900903	107	212	312	401
	E07	10SG900903	103	203	309	408
	E08	10SG900905	108	204	307	410
	E09	10SG900906	113	209	306	406
	E10	10SG900907	105	205	311	407
	E11	10SG900908	111	206	310	413
	E12	10SG900909	101	211	302	411
	E13	10SG900910	109	201	301	402
L09	E01	10SG900904	111	208	307	412
	E02	10SG900901	110	203	312	413
	E03	10SG900901	108	201	303	406
	E06	10SG900903	101	204	311	402
	E07	10SG900903	103	207	308	411
	E08	10SG900905	105	206	304	401
	E09	10SG900906	112	210	302	409
	E10	10SG900907	107	212	313	404
	E11	10SG900908	109	213	301	408
	E12	10SG900909	106	211	306	407
	E13	10SG900910	102	202	305	405
L10	E01	10SG900904	106	202	312	407
	E02	10SG900901	112	212	307	411
	E03	10SG900901	102	201	302	404
	E06	10SG900903	107	209	310	409
	E07	10SG900903	108	213	303	406
	E08	10SG900905	111	204	311	403
	E09	10SG900906	104	210	306	401
	E10	10SG900907	110	203	301	410
	E11	10SG900908	109	206	309	402
	E12	10SG900909	113	211	308	405
	E13	10SG900910	103	205	304	413

APPENDIX C Summary Tables of Individual–location Statistical Comparisons

LIST OF TABLES

TABLE C-1 Forage proximate composition: Individual-location comparison of SYHT0H2 soybean (test) and nontransgenic soybean (control)

Data source	Statistic	Moisture	Protein	Fat	Ash	Carbohydrates	ADF	NDF
Location 1								
Test[a]	mean	73.8	19.7	4.87	6.54	69.0	28.8	36.7
Control[a]	mean	73.0	18.4	4.71	7.31	69.7	26.6	32.5
	p	0.192	0.401	0.755	***0.008***	0.674	0.279	***0.037***
	SEM	0.45	1.04	0.354	0.187	1.12	1.59	1.36
Location 2								
Test	mean	71.8	19.2	5.88	6.42	68.4	26.9	33.9
Control	mean	72.8	19.1	5.85	6.68	68.5	30.4	33.1
	p	0.111	0.796	0.941	0.295	0.956	0.153	0.711
	SEM	0.52	0.48	0.373	0.175	0.72	1.66	1.58
Location 3								
Test	mean	68.8	20.7	6.69	5.45	67.2	26.3	32.3
Control	mean	68.5	20.8	8.33	5.64	65.3	27.7	31.2
	p	0.659	0.959	***0.046***	0.614	0.121	0.437	0.524
	SEM	0.48	0.69	0.557	0.260	0.82	1.28	1.23
Location 4								
Test	mean	71.2	18.1	6.45	6.21	69.3	23.1	28.1
Control	mean	70.3	16.6	6.74	6.40	70.3	27.1	32.4
	p	0.348	0.260	0.640	0.550	0.565	0.057	***0.047***
	SEM	0.69	1.01	0.450	0.245	1.24	1.42	1.44

Proximate levels shown as percent dry weight (% DW) except moisture which is shown as percent fresh weight (% FW)

(continued)

Results significantly different ($p < 0.05$) are shown in bold italic type

[a] $N = 4$ at all locations

TABLE C-1 Forage proximate composition: Individual-location comparison of SYHT0H2 soybean (test) and nontransgenic soybean (control) (*continued*)

Data source	Statistic	Moisture	Protein	Fat	Ash	Carbohydrates	ADF	NDF
Location 7								
Test[a]	mean	64.3	17.5	7.96	7.65	66.8	26.2	33.8
Control[a]	mean	63.2	16.7	8.20	7.73	67.4	28.0	34.8
	p	0.583	0.500	0.606	0.817	0.751	0.307	0.571
	SEM	1.64	0.85	0.343	0.227	1.16	1.22	1.26
Location 8								
Test	mean	70.5	20.6	6.34	6.90	66.2	28.3	34.0
Control	mean	70.7	19.5	5.91	7.61	67.1	25.9	31.3
	p	0.770	0.053	0.485	***0.033***	0.372	0.166	0.240
	SEM	0.49	0.41	0.432	0.223	0.68	1.19	1.59
Location 9								
Test	mean	72.6	17.7	5.78	6.55	70.0	28.5	32.3
Control	mean	70.1	18.5	5.86	6.61	69.1	26.8	32.2
	p	***<0.001***	0.269	0.905	0.870	0.372	0.359	0.990
	SEM	0.45	0.57	0.468	0.289	0.73	1.32	1.46
Location 10								
Test	mean	70.3	17.7	4.34	5.37	72.7	26.2	32.7
Control	mean	70.4	18.0	3.65	5.87	72.5	26.0	33.8
	p	0.848	0.760	0.095	0.065	0.852	0.882	0.540
	SEM	0.46	0.82	0.282	0.288	0.84	0.94	1.31

Proximate levels shown as percent dry weight (% DW) except moisture which is shown as percent fresh weight (% FW)
Results significantly different ($p < 0.05$) are shown in bold italic type
[a] $N = 4$ at all locations

TABLE C-2 Forage proximate composition: Individual-location comparison of SYHT0H2 soybean treated with trait-specific herbicides (test + TSH) and nontransgenic soybean (control)

Data source	Statistic	Moisture	Protein	Fat	Ash	Carbohydrates	ADF	NDF
Location 1								
Test + TSH[a]	mean	73.5	20.3	4.74	6.37	68.6	28.2	36.0
Control[b]	mean	73.0	18.4	4.71	7.31	69.7	26.6	32.5
	p	0.461	0.218	0.961	***0.002***	0.514	0.423	0.079
	SEM	0.45	1.04	0.354	0.187	1.12	1.59	1.36
Location 2								
Test + TSH	mean	72.4	18.8	5.16	6.71	69.4	28.7	33.2
Control	mean	72.8	19.1	5.85	6.68	68.5	30.4	33.1
	p	0.451	0.686	0.183	0.893	0.304	0.469	0.946
	SEM	0.52	0.48	0.373	0.175	0.72	1.66	1.58
Location 3								
Test + TSH	mean	69.8	20.8	6.39	6.85	66.0	24.6	31.2
Control	mean	68.5	20.8	8.33	5.64	65.3	27.7	31.2
	p	0.064	0.980	***0.020***	***0.003***	0.549	0.100	0.977
	SEM	0.48	0.69	0.557	0.260	0.82	1.28	1.23
Location 4								
Test + TSH	mean	71.1	18.2	6.02	6.42	69.4	23.4	30.0
Control	mean	70.3	16.6	6.74	6.40	70.3	27.1	32.4
	p	0.416	0.246	0.252	0.950	0.623	0.079	0.245
	SEM	0.69	1.01	0.450	0.245	1.24	1.42	1.44

Proximate levels shown as percent dry weight (% DW) except moisture which is shown as percent fresh weight (% FW)

(continued)

Results significantly different ($p < 0.05$) are shown in bold italic type

[a] Treated with the trait-specific herbicides (TSH) mesotrione and glufosinate, $N = 4$ at all locations

[b] $N = 4$ at all locations

TABLE C-2 Forage proximate composition: Individual-location comparison of SYHT0H2 soybean treated with trait-specific herbicides (test + TSH) and nontransgenic soybean (control) (*continued*)

Data source	Statistic	Moisture	Protein	Fat	Ash	Carbohydrates	ADF	NDF
Location 7								
Test + TSH[a]	mean	67.9	17.3	8.03	7.46	67.2	26.8	34.0
Control[b]	mean	63.2	16.7	8.20	7.73	67.4	28.0	34.8
	p	***0.020***	0.608	0.717	0.415	0.928	0.478	0.660
	SEM	1.64	0.85	0.343	0.227	1.16	1.22	1.26
Location 8								
Test + TSH	mean	70.2	20.9	5.36	7.59	66.2	25.5	29.7
Control	mean	70.7	19.5	5.91	7.61	67.1	25.9	31.3
	p	0.467	***0.017***	0.376	0.944	0.359	0.837	0.496
	SEM	0.49	0.41	0.432	0.223	0.68	1.19	1.59
Location 9								
Test + TSH	mean	71.6	16.6	6.00	6.84	70.7	27.6	31.2
Control	mean	70.1	18.5	5.86	6.61	69.1	26.8	32.2
	p	***0.021***	***0.013***	0.837	0.542	0.128	0.684	0.624
	SEM	0.45	0.57	0.468	0.289	0.73	1.32	1.46
Location 10								
Test + TSH	mean	69.7	17.1	3.63	5.69	73.7	25.9	31.0
Control	mean	70.4	18.0	3.65	5.87	72.5	26.0	33.8
	p	0.288	0.422	0.960	0.498	0.313	0.956	0.143
	SEM	0.46	0.82	0.282	0.288	0.84	0.94	1.31

Proximate levels shown as percent dry weight (% DW) except moisture which is shown as percent fresh weight (% FW)
Results significantly different ($p < 0.05$) are shown in bold italic type
[a] Treated with the trait-specific herbicides (TSH) mesotrione and glufosinate, $N = 4$ at all locations
[b] $N = 4$ at all locations

TABLE C-3 Seed proximate composition: Individual-location comparison of SYHT0H2 soybean (test) and nontransgenic soybean (control)

Data source	Statistic	Moisture	Protein	Fat	Ash	Carbohydrates	ADF	NDF
Location 1								
Test[a]	mean	8.05	37.9	19.0	5.45	37.7	13.6	16.5
Control[b]	mean	8.09	37.4	19.3	5.29	37.3	14.4	16.6
	p	0.881	0.354	0.532	0.315	0.483	0.599	0.917
	SEM	0.176	0.37	0.39	0.101, 0.117	0.50	1.13	0.89
Location 2								
Test	mean	7.01	39.8	19.5	5.12	35.7	13.4	15.5
Control	mean	6.71	39.7	19.9	4.93	35.5	13.9	16.0
	p	0.180	0.926	0.427	0.086	0.880	0.658	0.543
	SEM	0.155	0.94	0.39	0.077	0.93	0.79	0.61
Location 3								
Test	mean	8.64	40.9	20.9	5.23	33.1	13.6	15.7
Control	mean	8.84	41.1	21.1	5.16	32.7	15.0	16.6
	p	0.323	0.863	0.434	0.559	0.809	0.298	0.358
	SEM	0.152	0.72	0.22	0.087	1.01	0.92	0.71
Location 4								
Test	mean	8.33	36.9	21.4	5.18	36.5	13.8	16.5
Control	mean	8.43	35.2	21.4	5.44	38.1	15.9	16.2
	p	0.806	0.154	0.893	***0.020***	0.095	0.183	0.839
	SEM	0.292	0.97	0.41	0.080	0.72	1.09	0.96

Proximate levels shown as percent dry weight (% DW) except moisture which is shown as percent fresh weight (% FW)

(continued)

Results significantly different ($p < 0.05$) are shown in bold italic type

[a] $N = 4$ at all locations except at Location 10 where $N = 3$ due to a missing sample

[b] $N = 4$ at all locations except ash ($N = 3$) at Location 1 where one value was an outlier and was omitted from statistical analysis

TABLE C-3 Seed proximate composition: Individual-location comparison of SYHT0H2 soybean (test) and nontransgenic soybean (control) (*continued*)

Data source	Statistic	Moisture	Protein	Fat	Ash	Carbohydrates	ADF	NDF
Location 7								
Test[a]	mean	8.17	35.2	21.9	6.35	36.5	15.7	17.9
Control[b]	mean	7.67	34.7	22.1	6.23	36.9	15.9	17.5
	p	0.335	0.774	0.707	0.493	0.805	0.928	0.769
	SEM	0.368	1.28	0.42	0.125	1.20	1.16	0.95
Location 8								
Test	mean	11.93	39.5	20.3	5.01	35.3	12.6	14.3
Control	mean	12.23	40.4	20.5	5.25	33.9	13.2	16.0
	p	0.215	0.381	0.436	0.105	0.220	0.640	0.276
	SEM	0.167	0.80	0.25	0.106	0.86	0.95	1.07
Location 9								
Test	mean	9.37	40.0	20.6	5.42	34.0	14.8	15.8
Control	mean	9.58	39.4	20.5	5.28	34.8	15.0	16.6
	p	0.324	0.245	0.838	0.304	0.195	0.919	0.512
	SEM	0.166	0.34	0.26	0.097	0.43	0.90	0.87
Location 10								
Test	mean	7.74	39.2	21.0	4.54	35.3	13.4	15.3
Control	mean	8.05	38.1	20.8	4.46	36.7	15.3	18.1
	p	0.483	0.334	0.708	0.609	0.244	0.214	***0.046***
	SEM	0.343, 0.294	0.91, 0.79	0.38, 0.33	0.136, 0.121	0.87, 0.76	1.11, 0.96	1.02, 0.88

Proximate levels shown as percent dry weight (% DW) except moisture which is shown as percent fresh weight (% FW)
Results significantly different ($p < 0.05$) are shown in bold italic type
[a] $N = 4$ at all locations except at Location 10 where $N = 3$ due to a missing sample
[b] $N = 4$ at all locations except ash ($N = 3$) at Location 1 where one value was an outlier and was omitted from statistical analysis

TABLE C-4 Seed proximate composition: Individual-location comparison of SYHT0H2 soybean treated with trait-specific herbicides (test + TSH) and nontransgenic soybean (control)

Data source	Statistic	Moisture	Protein	Fat	Ash	Carbohydrates	ADF	NDF
Location 1								
Test + TSH[a]	mean	8.12	37.9	19.6	5.13	37.5	15.2	15.9
Control[b]	mean	8.09	37.4	19.3	5.29	37.3	14.4	16.6
	p	0.912	0.378	0.591	0.305	0.739	0.610	0.590
	SEM	0.176	0.37	0.39	0.101, 0.117	0.50	1.13	0.89
Location 2								
Test + TSH	mean	7.05	39.9	19.8	5.09	35.1	13.9	17.2
Control	mean	6.71	39.7	19.9	4.93	35.5	13.9	16.0
	p	0.139	0.867	0.859	0.161	0.807	0.982	0.171
	SEM	0.155	0.94	0.39	0.077	0.93	0.79	0.61
Location 3								
Test + TSH	mean	9.34	40.5	20.3	5.21	33.9	14.7	15.9
Control	mean	8.84	41.1	21.1	5.16	32.7	15.0	16.6
	p	***0.018***	0.556	***0.021***	0.672	0.400	0.863	0.455
	SEM	0.152	0.72	0.22	0.087	1.01	0.92	0.71
Location 4								
Test + TSH	mean	8.13	36.6	21.7	5.29	36.5	13.4	15.7
Control	mean	8.43	35.2	21.4	5.44	38.1	15.9	16.2
	p	0.471	0.249	0.590	0.174	0.100	0.119	0.711
	SEM	0.292	0.97	0.41	0.080	0.72	1.09	0.96

Proximate levels shown as percent dry weight (% DW) except moisture which is shown as percent fresh weight (% FW)

(continued)

Results significantly different ($p < 0.05$) are shown in bold italic type

[a] Treated with the trait-specific herbicides (TSH) mesotrione and glufosinate, $N = 4$ at all locations

[b] $N = 4$ at all locations except ash ($N = 3$) at Location 1 where one value was an outlier and was omitted from statistical analysis

TABLE C-4 Seed proximate composition: Individual-location comparison of SYHT0H2 soybean treated with trait-specific herbicides (test + TSH) and nontransgenic soybean (control) (*continued*)

Data source	Statistic	Moisture	Protein	Fat	Ash	Carbohydrates	ADF	NDF
Location 7								
Test + TSH[a]	mean	8.48	36.5	21.5	6.00	36.0	15.4	17.1
Control[b]	mean	7.67	34.7	22.1	6.23	36.9	15.9	17.5
	p	0.125	0.328	0.282	0.209	0.601	0.786	0.728
	SEM	0.368	1.28	0.42	0.125	1.20	1.16	0.95
Location 8								
Test + TSH	mean	11.68	39.0	20.3	5.13	35.6	12.9	15.0
Control	mean	12.23	40.4	20.5	5.25	33.9	13.2	16.0
	p	***0.028***	0.170	0.570	0.380	0.128	0.807	0.502
	SEM	0.167	0.80	0.25	0.106	0.86	0.95	1.07
Location 9								
Test + TSH	mean	9.36	40.0	20.6	5.22	34.3	14.5	16.5
Control	mean	9.58	39.4	20.5	5.28	34.8	15.0	16.6
	p	0.319	0.266	0.946	0.637	0.368	0.683	0.915
	SEM	0.166	0.34	0.26	0.097	0.43	0.90	0.87
Location 10								
Test + TSH	mean	8.28	37.0	20.7	4.35	37.9	16.5	18.1
Control	mean	8.05	38.1	20.8	4.46	36.7	15.3	18.1
	p	0.567	0.312	0.816	0.420	0.253	0.367	0.968
	SEM	0.294	0.79	0.33	0.121	0.76	0.96	0.88

Proximate levels shown as percent dry weight (% DW) except moisture which is shown as percent fresh weight (% FW)
Results significantly different ($p < 0.05$) are shown in bold italic type
[a] Treated with the trait-specific herbicides (TSH) mesotrione and glufosinate, $N = 4$ at all locations
[b] $N = 4$ at all locations except ash ($N = 3$) at Location 1 where one value was an outlier and was omitted from statistical analysis

TABLE C-5 Seed mineral composition: Individual-location comparison of SYHT0H2 soybean (test) and nontransgenic soybean (control)

Data source	Statistic	Ca	Fe	Mg	P	K
Location 1						
Test[a]	mean	2778	72.5	2358	6275	17700
Control[b]	mean	2655	78.0	2255	6198	17725
	p	0.077	0.155	***0.012***	0.565	0.923
	SEM	47.1	2.67	27.1	96.8	197.7
Location 2						
Test	mean	2905	82.3	2313	5130	17300
Control	mean	2858	80.4	2283	5088	17700
	p	0.257	0.335	0.414	0.768	0.100
	SEM	29.0	1.35	25.6	105.1	176.7
Location 3						
Test	mean	3450	77.6	2570	6428	16725
Control	mean	3183	77.5	2488	6413	17200
	p	***0.013***	0.987	0.074	0.938	0.257
	SEM	71.2	2.39	33.1	135.5	297.2
Location 4						
Test	mean	3093	77.0	2430	6528	16775
Control	mean	3143	79.4	2480	6785	17825
	p	0.383	0.384	0.297	0.119	***0.004***
	SEM	55.5	1.95	35.5	119.7	284.8

Mineral levels shown in mg/kg DW

(continued)

Results significantly different ($p < 0.05$) are shown in bold italic type

[a] $N = 4$ at all locations except iron ($N = 3$) at Location 1 where one value was an outlier and was omitted from statistical analysis and for all components ($N = 3$) at Location 10 due to a missing sample

[b] $N = 4$ at all locations except iron ($N = 3$) at Location 1 where one value was an outlier and was omitted from statistical analysis

TABLE C-5 Seed mineral composition: Individual-location comparison of SYHT0H2 soybean (test) and nontransgenic soybean (control) (*continued*)

Data source	Statistic	Ca	Fe	Mg	P	K
Location 7						
Test[a]	mean	3453	97.1	2840	8095	20375
Control[b]	mean	3460	100.0	2813	8123	21300
	p	0.961	0.595	0.666	0.927	0.189
	SEM	123.4	4.94	59.0	235.7	485.2
Location 8						
Test	mean	2483	83.8	2335	5998	17225
Control	mean	2380	93.5	2318	6043	18075
	p	0.062	***0.001***	0.627	0.769	***0.006***
	SEM	38.4	2.02	29.7	119.9	203.3
Location 9						
Test	mean	3393	78.3	2488	6238	17250
Control	mean	3313	79.2	2460	5993	17375
	p	0.240	0.592	0.554	***0.046***	0.649
	SEM	49.7	1.21	32.6	96.9	192.1
Location 10						
Test	mean	2921	74.1	2123	4439	14591
Control	mean	2928	79.8	2035	4293	14775
	p	0.912	0.434	***0.045***	0.303	0.650
	SEM	58.2, 53.9	5.64, 4.88	35.7, 31.6	107.6, 92.1	475.2, 447.5

Mineral levels shown in mg/kg DW
Results significantly different ($p < 0.05$) are shown in bold italic type
[a] $N = 4$ at all locations except iron ($N = 3$) at Location 1 where one value was an outlier and was omitted from statistical analysis and for all components ($N = 3$) at Location 10 due to a missing sample
[b] $N = 4$ at all locations except iron ($N = 3$) at Location 1 where one value was an outlier and was omitted from statistical analysis

TABLE C-6 Seed mineral composition: Individual-location comparison of SYHT0H2 soybean treated with trait-specific herbicides (test + TSH) and nontransgenic soybean (control)

Data source	Statistic	Ca	Fe	Mg	P	K
Location 1						
Test + TSH[a]	mean	2723	70.8	2373	6343	17625
Control[b]	mean	2655	78.0	2255	6198	17725
	p	0.320	0.051	***0.005***	0.286	0.699
	SEM	47.1	2.31, 2.67	27.1	96.8	197.7
Location 2						
Test + TSH	mean	2850	81.4	2280	5268	17550
Control	mean	2858	80.4	2283	5088	17700
	p	0.856	0.614	0.945	0.218	0.527
	SEM	29.0	1.35	25.6	105.1	176.7
Location 3						
Test + TSH	mean	3180	78.8	2425	6605	16575
Control	mean	3183	77.5	2488	6413	17200
	p	0.980	0.694	0.170	0.324	0.140
	SEM	71.2	2.39	33.1	135.5	297.2
Location 4						
Test + TSH	mean	2945	77.0	2403	6505	16725
Control	mean	3143	79.4	2480	6785	17825
	p	***0.002***	0.379	0.111	0.091	***0.003***
	SEM	55.5	1.95	35.5	119.7	284.8

Results significantly different ($p < 0.05$) are shown in bold italic type *(continued)*

[a] Treated with the trait-specific herbicides (TSH) mesotrione and glufosinate, $N = 4$

[b] $N = 4$ at all locations except iron ($N = 3$) at Location 1 where one value was an outlier and was omitted from statistical analysis

TABLE C-6 Seed mineral composition: Individual-location comparison of SYHT0H2 soybean treated with trait-specific herbicides (test + TSH) and nontransgenic soybean (control) (*continued*)

Data source	Statistic	Ca	Fe	Mg	P	K
Location 7						
Test + TSH[a]	mean	3025	92.5	2830	7945	20025
Control	mean	3460	100.0	2813	8123	21300
	p	***0.008***	0.178	0.783	0.557	0.074
	SEM	123.4	4.94	59.0	235.7	485.2
Location 8						
Test + TSH	mean	2400	86.6	2330	6100	18025
Control	mean	2380	93.5	2318	6043	18075
	p	0.705	***0.015***	0.728	0.707	0.863
	SEM	38.4	2.02	29.7	119.9	203.3
Location 9						
Test + TSH	mean	3328	78.6	2563	6200	17175
Control	mean	3313	79.2	2460	5993	17375
	p	0.823	0.695	***0.035***	0.087	0.468
	SEM	49.7	1.21	32.6	96.9	192.1
Location 10						
Test + TSH	mean	2945	73.7	2110	4488	14625
Control	mean	2928	79.8	2035	4293	14775
	p	0.733	0.356	0.061	0.138	0.688
	SEM	53.9	4.88	31.6	92.1	447.5

Results significantly different ($p < 0.05$) are shown in bold italic type

[a] Treated with the trait-specific herbicides (TSH) mesotrione and glufosinate, $N = 4$ at all locations

[b] $N = 4$ at all locations except iron ($N = 3$) at Location 1 where one value was an outlier and was omitted from statistical analysis

TABLE C-7 Seed vitamin composition: Individual-location comparison of SYHT0H2 soybean (test) and nontransgenic soybean (control)

Data source	Statistic	Vitamin A β-carotene	Vitamin B_1 Thiamine	Vitamin B_2 Riboflavin	Vitamin B_9 Folic Acid	Vitamin K_1 Phytonadione
Location 1						
Test[a]	mean	<LOQ	0.437	0.376	0.420	0.303
Control[b]	mean	<LOQ	0.472	0.405	0.388	0.414
	p	–	0.453	0.439	0.382	***0.050***
	SEM	–	0.0327	0.0263	0.0259	0.0382
Location 2						
Test	mean	<LOQ	0.438	0.373	0.499	0.323
Control	mean	<LOQ	0.463	0.373	0.483	0.333
	p	–	0.213	0.995	0.598	0.891
	SEM	–	0.0149	0.0300	0.0212	0.0522
Location 3						
Test	mean	0.116	0.621	0.322	0.571	0.645
Control	mean	0.184	0.640	0.376	0.502	0.770
	p	–[c]	0.600	0.187	0.136	0.087
	SEM	–[c]	0.0253	0.0285	0.0320	0.0496
Location 4						
Test	mean	<LOQ–0.0281	0.558	0.434	0.418	0.388
Control	mean	<LOQ–0.0432	0.555	0.362	0.409	0.332
	p	–	0.929	***0.019***	0.784	0.367
	SEM	–	0.0277	0.0205	0.0238	0.0439

Vitamin levels shown in mg/100g DW, except vitamin K_1 (ppm)

(continued)

Where some or all values were < LOQ, calculation of the mean and statistical comparison could not be performed so only the range is shown

Results significantly different ($p < 0.05$) are shown in bold italic type

[a] $N = 4$ at all locations except at Location 10 where $N = 3$ due to a missing sample

[b] $N = 4$ at all locations

[c] No statistical comparison was performed because the estimate of plot error was based on all entries (including reference varieties) and some values were < LOQ

TABLE C-7 Seed vitamin composition: Individual-location comparison of SYHT0H2 soybean (test) and nontransgenic soybean (control) (*continued*)

Data source	Statistic	Vitamin A β-carotene	Vitamin B_1 Thiamine	Vitamin B_2 Riboflavin	Vitamin B_9 Folic Acid	Vitamin K_1 Phytonadione
Location 7						
Test[a]	mean	0.117	0.634	0.467	0.489	0.531
Control[b]	mean	0.099	0.629	0.454	0.447	0.578
	p	–[c]	0.959	0.731	0.200	0.603
	SEM	–[c]	0.0686	0.0274	0.0225	0.0666
Location 8						
Test	mean	<LOQ	0.369	0.322	0.252	0.244
Control	mean	<LOQ	0.378	0.334	0.250	0.318
	p	–	0.819	0.733	0.886	0.171
	SEM	–	0.0308	0.0268	0.0112	0.0373
Location 9						
Test	mean	<LOQ–0.0350	0.461	0.386	0.412	0.379
Control	mean	0.0395	0.509	0.371	0.415	0.473
	p	–	0.147	0.713	0.924	0.252
	SEM	–	0.0230	0.0276	0.0217	0.0584
Location 10						
Test	mean	0.0369	0.601	0.393	0.459	0.493
Control	mean	<LOQ–0.0413	0.636	0.374	0.426	0.477
	p	–	0.278	0.547	0.259	0.829
	SEM	–	0.0291, 0.0263	0.0241, 0.0209	0.0222, 0.0189	0.0642, 0.0569

Vitamin levels shown in mg/100g DW, except vitamin K_1 (ppm)
Where some or all values were < LOQ, calculation of the mean and statistical comparison could not be performed so only the range is shown
Results significantly different ($p < 0.05$) are shown in bold italic type
[a] $N = 4$ at all locations except at Location 10 where $N = 3$ due to a missing sample
[b] $N = 4$ at all locations
[c] No statistical comparison was performed because the estimate of plot error was based on all entries (including reference varieties) and some values were < LOQ

TABLE C-8 Seed vitamin composition: Individual-location comparison of SYHT0H2 soybean treated with trait-specific herbicides (test + TSH) and nontransgenic soybean (control)

Data source	Statistic	Vitamin A β-carotene	Vitamin B_1 Thiamine	Vitamin B_2 Riboflavin	Vitamin B_9 Folic Acid	Vitamin K_1 Phytonadione
Location 1						
Test + TSH[a]	mean	<LOQ	0.523	0.382	0.436	0.290
Control[b]	mean	<LOQ	0.472	0.405	0.388	0.414
	p	–	0.285	0.542	0.196	***0.029***
	SEM	–	0.0327	0.0263	0.0259	0.0382
Location 2						
Test + TSH	mean	<LOQ	0.464	0.374	0.405	0.419
Control	mean	<LOQ	0.463	0.373	0.483	0.333
	p	–	0.961	0.991	***0.014***	0.246
	SEM	–	0.0149	0.0300	0.0212	0.0522
Location 3						
Test + TSH	mean	0.198	0.547	0.395	0.541	0.500
Control	mean	0.184	0.640	0.376	0.502	0.770
	p	–[c]	***0.015***	0.629	0.394	***0.001***
	SEM	–[c]	0.0253	0.0285	0.0320	0.0496
Location 4						
Test + TSH	mean	<LOQ–0.0346	0.599	0.410	0.392	0.361
Control	mean	<LOQ–0.0432	0.555	0.362	0.409	0.332
	p	–	0.241	0.110	0.610	0.643
	SEM	–	0.0277	0.0205	0.0238	0.0439

Vitamin levels shown in mg/100g DW, except vitamin K_1 (ppm)

(continued)

Where some or all values were < LOQ, calculation of the mean and statistical comparison could not be performed so only the range is shown

Results significantly different ($p < 0.05$) are shown in bold italic type

[a] Treated with the trait-specific herbicides (TSH) mesotrione and glufosinate, $N = 4$ at all locations

[b] $N = 4$ at all locations

[c] No statistical comparison was performed because the estimate of plot error was based on all entries (including reference varieties) and some values were < LOQ

TABLE C-8 Seed vitamin composition: Individual-location comparison of SYHT0H2 soybean treated with trait-specific herbicides (test + TSH) and nontransgenic soybean (control) (continued)

Data source	Statistic	Vitamin A[a] β-carotene	Vitamin B_1 Thiamine	Vitamin B_2 Riboflavin	Vitamin B_9 Folic Acid	Vitamin K_1 Phytonadione
Location 7						
Test + TSH[a]	mean	0.082	0.642	0.452	0.452	0.503
Control[b]	mean	0.099	0.629	0.454	0.447	0.578
	p	–[c]	0.895	0.969	0.881	0.409
	SEM	–[c]	0.0686	0.0274	0.0225	0.0666
Location 8						
Test + TSH	mean	<LOQ–0.0270	0.379	0.407	0.256	0.251
Control	mean	<LOQ	0.378	0.334	0.250	0.318
	p	–	0.979	0.062	0.679	0.214
	SEM	–	0.0308	0.0268	0.0112	0.0373
Location 9						
Test + TSH	mean	0.0311	0.505	0.342	0.489	0.388
Control	mean	0.0395	0.509	0.371	0.415	0.473
	p	–[c]	0.897	0.452	***0.017***	0.302
	SEM	–[c]	0.0230	0.0276	0.0217	0.0584
Location 10						
Test + TSH	mean	0.0336	0.625	0.390	0.444	0.420
Control	mean	<LOQ–0.0413	0.636	0.374	0.426	0.477
	p	–	0.705	0.593	0.492	0.409
	SEM	–	0.0263	0.0209	0.0189	0.0569

Vitamin levels shown in mg/100g DW, except vitamin K_1 (ppm)
Where some or all values were < LOQ, calculation of the mean and statistical comparison could not be performed so only the range is shown
Results significantly different ($p < 0.05$) are shown in bold italic type
[a] Treated with the trait-specific herbicides (TSH) mesotrione and glufosinate, $N = 4$ at all locations
[b] $N = 4$ at all locations
[c] No statistical comparison was performed because the estimate of plot error was based on all entries (including reference varieties) and some values were < LOQ

TABLE C-9 Seed vitamin E composition: Individual-location comparison of SYHT0H2 soybean (test) and nontransgenic soybean (control)

Data source	Statistic	α-tocopherol	β-tocopherol	γ-tocopherol	δ-tocopherol	α-tocotrienol	β-tocotrienol	γ-tocotrienol	δ-tocotrienol
Location 1									
Test[a]	mean	0.0125	<LOQ	0.203	0.1010	<LOQ	<LOQ	<LOQ	<LOQ
Control[b]	mean	0.0115	<LOQ	0.178	0.0802	<LOQ	<LOQ	<LOQ	<LOQ
	p	0.396	–	***0.012***	***<0.001***	–	–	–	–
	SEM	0.00084	–	0.0066	0.00236	–	–	–	–
Location 2									
Test	mean	0.0173	<LOQ	0.208	0.0786	<LOQ	<LOQ	<LOQ	<LOQ
Control	mean	0.0175	<LOQ	0.194	0.0656	<LOQ	<LOQ	<LOQ	<LOQ
	p	0.802	–	0.066	***<0.001***	–	–	–	–
	SEM	0.00070	–	0.0054	0.00154	–	–	–	–
Location 3									
Test	mean	0.0297	<LOQ	0.242	0.0695	<LOQ	<LOQ	<LOQ	<LOQ
Control	mean	0.0388	<LOQ	0.209	0.0463	<LOQ	<LOQ	<LOQ	<LOQ
	p	***0.039***	–	***<0.001***	***<0.001***	–	–	–	–
	SEM	0.00294	–	0.0045	0.00179	–	–	–	–
Location 4									
Test	mean	0.0156	<LOQ	0.227	0.0934	<LOQ	<LOQ–0.549	<LOQ	<LOQ
Control	mean	0.0161	<LOQ	0.197	0.0732	<LOQ	<LOQ	<LOQ	<LOQ
	p	0.685	–	***0.013***	***<0.001***	–	–	–	–
	SEM	0.00118	–	0.0100	0.00237	–	–	–	–

(continued)

Tocopherol and tocotrienol levels shown as milligrams per gram dry weight (mg/g DW); original units of mg/100 g reported by Covance Laboratories were converted to mg/g

Results significantly different ($p < 0.05$) are shown in bold italic type. Where some or all values were < LOQ, calculation of the mean and ANOVA could not be performed so only the range is shown.

[a] $N = 4$ at all locations except at Location 10 where $N = 3$ due to a missing sample

[b] $N = 4$ at all locations

TABLE C-9 Seed vitamin E composition: Individual-location comparison of SYHT0H2 soybean (test) and nontransgenic soybean (control) (*continued*)

Data source	Statistic	α-tocopherol	β-tocopherol	γ-tocopherol	δ-tocopherol	α-tocotrienol	β-tocotrienol	γ-tocotrienol	δ-tocotrienol
Location 7									
Test[a]	mean	0.0478	<LOQ	0.247	0.0556	<LOQ	<LOQ	<LOQ	<LOQ
Control[b]	mean	0.0554	<LOQ	0.215	0.0376	<LOQ	<LOQ	<LOQ	<LOQ
	p	0.146	–	***0.005***	***<0.001***	–	–	–	–
	SEM	0.00363	–	0.0085	0.00220	–	–	–	–
Location 8									
Test	mean	0.0214	<LOQ	0.210	0.0769	<LOQ	<LOQ	<LOQ	<LOQ
Control	mean	0.0231	<LOQ	0.175	0.0604	<LOQ	<LOQ	<LOQ	<LOQ
	p	0.413	–	***0.003***	***<0.001***	–	–	–	–
	SEM	0.00189	–	0.0077	0.00197	–	–	–	–
Location 9									
Test	mean	0.0213	<LOQ	0.231	0.0741	<LOQ	<LOQ	<LOQ	<LOQ
Control	mean	0.0237	<LOQ	0.213	0.0567	<LOQ	<LOQ	<LOQ	<LOQ
	p	0.098	–	0.086	***<0.001***	–	–	–	–
	SEM	0.00098	–	0.0072	0.00241	–	–	–	–
Location 10									
Test	mean	0.0165	<LOQ	0.235	0.0818	<LOQ	<LOQ	<LOQ	<LOQ
Control	mean	0.0207	<LOQ	0.225	0.0692	<LOQ	<LOQ	<LOQ	<LOQ
	p	***0.046***	–	0.270	0.062	–	–	–	–
	SEM	0.00172, 0.00153	–	0.0081, 0.0072	0.00490, 0.00424	–	–	–	–

Tocopherol and tocotrienol levels shown as milligrams per gram dry weight (mg/g DW); original units of mg/100 g reported by Covance Laboratories were converted to mg/g

Results significantly different ($p < 0.05$) are shown in bold italic type. Where some or all values were < LOQ, calculation of the mean and ANOVA could not be performed so only the range is shown.

[a] $N = 4$ at all locations except at Location 10 where $N = 3$ due to a missing sample

[b] $N = 4$ at all locations

TABLE C-10 Seed vitamin E composition: Individual-location comparison of SYHT0H2 soybean treated with trait-specific herbicides (test + TSH) and nontransgenic soybean (control)

Data source	Statistic	α-tocopherol	β-tocopherol	γ-tocopherol	δ-tocopherol	α-tocotrienol	β-tocotrienol	γ-tocotrienol	δ-tocotrienol
Location 1									
Test + TSH[a]	mean	0.0111	<LOQ	0.198	0.0989	<LOQ	<LOQ	<LOQ	<LOQ
Control[b]	mean	0.0115	<LOQ	0.178	0.0802	<LOQ	<LOQ	<LOQ	<LOQ
	p	0.760	–	***0.043***	***<0.001***	–	–	–	–
	SEM	0.00084	–	0.0066	0.00236	–	–	–	–
Location 2									
Test + TSH	mean	0.0166	<LOQ	0.200	0.0754	<LOQ	<LOQ	<LOQ	<LOQ
Control	mean	0.0175	<LOQ	0.194	0.0656	<LOQ	<LOQ	<LOQ	<LOQ
	p	0.345	–	0.425	***<0.001***	–	–	–	–
	SEM	0.00070	–	0.0054	0.00154	–	–	–	–
Location 3									
Test + TSH	mean	0.0383	<LOQ	0.227	0.0653	<LOQ	<LOQ	<LOQ	<LOQ
Control	mean	0.0388	<LOQ	0.209	0.0463	<LOQ	<LOQ	<LOQ	<LOQ
	p	0.905	–	***0.008***	***<0.001***	–	–	–	–
	SEM	0.00294	–	0.0045	0.00179	–	–	–	–
Location 4									
Test + TSH	mean	0.0165	<LOQ	0.233	0.0986	<LOQ	<LOQ–0.628	<LOQ	<LOQ
Control	mean	0.0161	<LOQ	0.197	0.0732	<LOQ	<LOQ	<LOQ	<LOQ
	p	0.733	–	***0.004***	***<0.001***	–	–	–	–
	SEM	0.00118	–	0.0100	0.00237	–	–	–	–

(continued)

Tocopherol and tocotrienol levels shown as milligrams per gram dry weight (mg/g DW); original units of mg/100 g reported by Covance Laboratories were converted to mg/g

Results significantly different ($p < 0.05$) are shown in bold italic type. Where some or all values were < LOQ, calculation of the mean and ANOVA could not be performed so only the range is shown.

[a] Treated with the trait-specific herbicides (TSH) mesotrione and glufosinate, $N = 4$ at all locations

[b] $N = 4$ at all locations

TABLE C-10 Seed vitamin E composition: Individual-location comparison of SYHT0H2 soybean treated with trait-specific herbicides (test + TSH) and nontransgenic soybean (control) (*continued*)

Data source	Statistic	α-tocopherol	β-tocopherol	γ-tocopherol	δ-tocopherol	α-tocotrienol	β-tocotrienol	γ-tocotrienol	δ-tocotrienol
Location 7									
Test + TSH[a]	mean	0.0522	<LOQ	0.227	0.0454	<LOQ	<LOQ	<LOQ	<LOQ
Control[b]	mean	0.0554	<LOQ	0.215	0.0376	<LOQ	<LOQ	<LOQ	<LOQ
	p	0.529	–	0.266	***0.009***	–	–	–	–
	SEM	0.00363	–	0.0085	0.00220	–	–	–	–
Location 8									
Test + TSH	mean	0.0228	<LOQ	0.200	0.0683	<LOQ	<LOQ	<LOQ	<LOQ
Control	mean	0.0231	<LOQ	0.175	0.0604	<LOQ	<LOQ	<LOQ	<LOQ
	p	0.901	–	***0.032***	***0.007***	–	–	–	–
	SEM	0.00189	–	0.0077	0.00197	–	–	–	–
Location 9									
Test + TSH	mean	0.0182	<LOQ	0.202	0.0703	<LOQ	<LOQ	<LOQ	<LOQ
Control	mean	0.0237	<LOQ	0.213	0.0567	<LOQ	<LOQ	<LOQ	<LOQ
	p	***0.001***	–	0.320	***<0.001***	–	–	–	–
	SEM	0.00098	–	0.0072	0.00241	–	–	–	–
Location 10									
Test + TSH	mean	0.0170	<LOQ	0.230	0.0855	<LOQ	<LOQ	<LOQ	<LOQ
Control	mean	0.0207	<LOQ	0.225	0.0692	<LOQ	<LOQ	<LOQ	<LOQ
	p	0.051	–	0.549	***0.011***	–	–	–	–
	SEM	0.00153	–	0.0072	0.00424	–	–	–	–

Tocopherol and tocotrienol levels shown as milligrams per gram dry weight (mg/g DW); original units of mg/100 g reported by Covance Laboratories were converted to mg/g

Results significantly different ($p < 0.05$) are shown in bold italic type. Where some or all values were < LOQ, calculation of the mean and ANOVA could not be performed so only the range is shown.

[a] Treated with the trait-specific herbicides (TSH) mesotrione and glufosinate, $N = 4$ at all locations

[b] $N = 4$ at all locations

TABLE C-11 Seed amino acid composition: Individual-location comparison of SYHT0H2 soybean (test) and nontransgenic soybean (control)

Data source	Statistic	Asp	Thr	Ser	Glu	Pro	Gly	Ala	Cys	Val
Location 1										
Test[a]	mean	43.4	15.5	18.8	64.9	19.3	16.6	17.1	5.23	19.1
Control[b]	mean	43.0	15.3	19.0	65.0	18.8	16.2	16.8	5.39	18.5
	p	0.624	0.445	0.762	0.989	0.234	0.317	0.333	0.579	0.155
	SEM	0.64	0.21	0.42	1.28	0.28	0.25	0.16	0.192	0.31
Location 2										
Test	mean	45.3	16.0	19.5	67.6	20.2	17.1	17.4	5.80	19.5
Control	mean	45.6	16.2	19.9	68.8	20.1	17.2	17.5	5.77	19.6
	p	0.672	0.507	0.369	0.437	0.819	0.432	0.544	0.851	0.694
	SEM	0.45	0.16	0.35	1.08	0.31	0.16	0.14	0.137	0.27
Location 3										
Test	mean	47.4	16.3	20.9	72.6	21.2	17.6	18.1	6.15	19.8
Control	mean	46.4	15.9	20.4	70.8	20.4	17.6	17.9	6.03	19.7
	p	0.307	0.177	0.260	0.318	0.071	0.925	0.387	0.533	0.906
	SEM	0.68	0.18	0.35	1.29	0.32	0.19	0.22	0.132	0.30
Location 4										
Test	mean	41.6	15.1	18.3	61.6	18.2	16.1	16.4	6.06	18.0
Control	mean	40.2	14.6	17.7	58.8	17.5	15.6	16.0	6.07	17.4
	p	0.348	0.253	0.392	0.313	0.301	0.363	0.425	0.952	0.311
	SEM	1.22	0.37	0.59	2.27	0.59	0.40	0.41	0.130	0.48

Amino acid levels shown as milligrams per gram dry weight (mg/g DW)
Results significantly different ($p < 0.05$) are shown in bold italic type
[a] $N = 4$ at all locations except at Location 10 where $N = 3$ due to a missing sample
[b] $N = 4$ at all locations

(continued)

TABLE C-11 Seed amino acid composition: Individual-location comparison of SYHT0H2 soybean (test) and nontransgenic soybean (control) (*continued*)

Data source	Statistic	Asp	Thr	Ser	Glu	Pro	Gly	Ala	Cys	Val
Location 7										
Test[a]	mean	40.2	14.7	18.0	59.7	17.6	15.7	16.5	6.06	17.5
Control[b]	mean	39.3	14.7	17.7	58.3	17.7	15.6	16.3	6.02	17.4
	p	0.570	0.956	0.632	0.658	0.975	0.773	0.627	0.860	0.971
	SEM	1.15	0.33	0.52	2.25	0.57	0.36	0.34	0.149	0.48
Location 8										
Test	mean	44.8	16.2	19.6	68.2	20.1	17.5	17.8	5.49	19.4
Control	mean	44.0	15.9	19.5	67.9	19.6	17.0	17.5	5.57	19.2
	p	0.283	0.223	0.803	0.840	0.094	0.065	0.082	0.729	0.559
	SEM	0.52	0.17	0.35	1.06	0.23	0.18	0.12	0.166	0.27
Location 9										
Test	mean	46.1	16.2	20.7	69.7	20.4	17.4	17.9	5.77	19.2
Control	mean	44.4	15.7	19.3	66.9	19.6	17.2	17.5	5.68	19.2
	p	***0.002***	***0.011***	***0.003***	***0.030***	0.070	0.272	***0.025***	0.633	0.940
	SEM	0.35	0.13	0.29	0.87	0.32	0.14	0.12	0.149	0.24
Location 10										
Test	mean	44.2	15.9	19.0	65.8	20.3	17.1	17.7	5.21	19.5
Control	mean	42.5	15.4	18.3	62.0	18.9	16.6	16.8	5.34	18.5
	p	***0.047***	0.054	0.189	0.059	***0.013***	***0.024***	***0.001***	0.513	***0.010***
	SEM	0.68, 0.59	0.21, 0.18	0.41, 0.36	1.53, 1.32	0.43, 0.38	0.19, 0.16	0.19, 0.17	0.172, 0.153	0.29, 0.25

Amino acid levels shown as milligrams per gram dry weight (mg/g DW)
Results significantly different ($p < 0.05$) are shown in bold italic type
[a] $N = 4$ at all locations except at Location 10 where $N = 3$ due to a missing sample
[b] $N = 4$ at all locations

TABLE C-11 Seed amino acid composition: Individual-location comparison of SYHT0H2 soybean (test) and nontransgenic soybean (control) (*continued*)

Data source	Statistic	Met	Ile	Leu	Tyr	Phe	Lys	His	Arg	Trp
Location 1										
Test[a]	mean	5.24	18.5	29.4	15.0	19.8	24.7	10.3	28.3	5.71
Control[b]	mean	5.13	18.1	28.9	14.7	19.5	23.3	10.0	27.5	5.44
	p	0.447	0.218	0.323	0.181	0.436	0.083	0.357	0.266	0.095
	SEM	0.107	0.25	0.35	0.19	0.29	0.52	0.16	0.48	0.107
Location 2										
Test	mean	5.03	19.0	30.2	15.3	20.4	25.0	10.6	29.2	5.90
Control	mean	5.24	19.2	30.3	15.7	20.4	24.3	10.8	29.6	5.95
	p	0.276	0.587	0.725	0.118	0.927	0.207	0.484	0.356	0.722
	SEM	0.130	0.19	0.25	0.16	0.19	0.40	0.12	0.34	0.099
Location 3										
Test	mean	5.57	19.7	31.6	16.0	21.3	26.0	10.8	31.0	6.00
Control	mean	5.23	19.7	31.0	15.6	20.8	24.6	10.5	30.3	6.08
	p	0.083	0.945	0.228	0.209	0.241	***0.040***	0.205	0.302	0.420
	SEM	0.135	0.25	0.37	0.22	0.27	0.48	0.16	0.49	0.075
Location 4										
Test	mean	5.15	17.8	27.9	14.4	18.4	23.3	9.9	26.5	5.41
Control	mean	5.21	17.1	27.1	14.0	17.9	23.1	9.5	25.5	5.37
	p	0.720	0.252	0.422	0.314	0.492	0.772	0.259	0.392	0.817
	SEM	0.137	0.47	0.79	0.35	0.60	0.66	0.29	0.92	0.141

Amino acid levels shown as milligrams per gram dry weight (mg/g DW)
Results significantly different ($p < 0.05$) are shown in bold italic type
[a] $N = 4$ at all locations except at Location 10 where $N = 3$ due to a missing sample
[b] $N = 4$ at all locations

(continued)

TABLE C-11 Seed amino acid composition: Individual-location comparison of SYHT0H2 soybean (test) and nontransgenic soybean (control) (*continued*)

Data source	Statistic	Met	Ile	Leu	Tyr	Phe	Lys	His	Arg	Trp
Location 7										
Test[a]	mean	4.77	17.2	26.8	13.9	17.8	22.8	9.8	25.4	5.59
Control[b]	mean	4.85	17.0	26.3	13.9	17.4	22.2	9.7	24.9	5.46
	p	0.768	0.726	0.613	0.960	0.558	0.504	0.639	0.701	0.436
	SEM	0.184	0.45	0.71	0.35	0.52	0.57	0.19	0.84	0.127
Location 8										
Test	mean	5.41	19.0	30.2	15.2	20.5	24.2	10.7	30.1	5.72
Control	mean	5.19	18.8	29.8	15.2	20.0	24.0	10.4	28.7	5.71
	p	0.248	0.727	0.325	1.000	0.125	0.752	0.174	***0.012***	0.961
	SEM	0.130	0.25	0.26	0.18	0.20	0.40	0.16	0.39	0.108
Location 9										
Test	mean	5.23	19.1	30.8	15.7	20.6	25.6	10.7	29.8	5.58
Control	mean	5.20	19.1	29.9	15.2	20.0	24.2	10.3	28.3	5.85
	p	0.829	1.000	***0.011***	***0.019***	***0.008***	***0.039***	***0.020***	***0.001***	0.054
	SEM	0.097	0.17	0.23	0.13	0.16	0.46	0.11	0.30	0.096
Location 10										
Test	mean	5.01	19.0	30.0	15.7	20.4	25.4	10.7	29.7	5.90
Control	mean	5.00	18.5	28.7	14.8	19.4	23.9	10.1	28.0	5.68
	p	0.961	0.235	***0.010***	***0.002***	***0.005***	0.051	***0.029***	***0.010***	0.173
	SEM	0.191, 0.165	0.27, 0.24	0.39, 0.34	0.22, 0.20	0.28, 0.25	0.57, 0.49	0.21, 0.18	0.59, 0.53	0.130, 0.113

Amino acid levels shown as milligrams per gram dry weight (mg/g DW)
Results significantly different ($p < 0.05$) are shown in bold italic type
[a] $N = 4$ at all locations except at Location 10 where $N = 3$ due to a missing sample
[b] $N = 4$ at all locations

TABLE C-12 Seed amino acid composition: Individual-location comparison of SYHT0H2 soybean treated with trait-specific herbicides (test + TSH) and nontransgenic soybean (control)

Data source	Statistic	Asp	Thr	Ser	Glu	Pro	Gly	Ala	Cys	Val
Location 1										
Test + TSH[a]	mean	43.3	15.2	19.0	65.4	18.9	16.6	16.8	5.49	18.8
Control[b]	mean	43.0	15.3	19.0	65.0	18.8	16.2	16.8	5.39	18.5
	p	0.703	0.864	0.897	0.805	0.849	0.227	0.828	0.702	0.437
	SEM	0.64	0.21	0.42	1.28	0.28	0.25	0.16	0.192	0.31
Location 2										
Test + TSH	mean	44.9	15.9	19.5	67.4	20.0	17.2	17.5	5.75	19.3
Control	mean	45.6	16.2	19.9	68.8	20.1	17.2	17.5	5.77	19.6
	p	0.339	0.272	0.458	0.373	0.774	0.735	0.808	0.936	0.362
	SEM	0.45	0.16	0.35	1.08	0.31	0.16	0.14	0.137	0.27
Location 3										
Test + TSH	mean	47.6	16.2	20.6	71.8	20.9	17.8	18.1	6.20	20.1
Control	mean	46.4	15.9	20.4	70.8	20.4	17.6	17.9	6.03	19.7
	p	0.222	0.331	0.692	0.568	0.303	0.454	0.387	0.356	0.351
	SEM	0.68	0.18	0.35	1.29	0.32	0.19	0.22	0.132	0.30
Location 4										
Test + TSH	mean	42.1	15.2	18.8	62.8	18.8	16.1	16.6	6.20	17.7
Control	mean	40.2	14.6	17.7	58.8	17.5	15.6	16.0	6.07	17.4
	p	0.214	0.193	0.131	0.161	0.085	0.339	0.290	0.451	0.570
	SEM	1.22	0.37	0.59	2.27	0.59	0.40	0.41	0.130	0.48

Amino acid levels shown as milligrams per gram dry weight (mg/g DW)

Results significantly different ($p < 0.05$) are shown in bold italic type

[a] Treated with the trait-specific herbicides (TSH) mesotrione and glufosinate, $N = 4$ at all locations

[b] $N = 4$ at all locations

(continued)

TABLE C-12 Seed amino acid composition: Individual-location comparison of SYHT0H2 soybean treated with trait-specific herbicides (test + TSH) and nontransgenic soybean (control) (*continued*)

Data source	Statistic	Asp	Thr	Ser	Glu	Pro	Gly	Ala	Cys	Val
Location 7										
Test + TSH[a]	mean	41.1	15.0	18.4	61.0	18.2	16.1	16.5	6.23	18.0
Control[b]	mean	39.3	14.7	17.7	58.3	17.7	15.6	16.3	6.02	17.4
	p	0.280	0.478	0.342	0.391	0.497	0.318	0.553	0.328	0.422
	SEM	1.15	0.33	0.52	2.25	0.57	0.36	0.34	0.149	0.48
Location 8										
Test + TSH	mean	44.3	15.9	19.2	67.8	20.2	17.2	17.6	5.48	19.7
Control	mean	44.0	15.9	19.5	67.9	19.6	17.0	17.5	5.57	19.2
	p	0.735	1.000	0.518	0.973	0.070	0.369	0.552	0.698	0.199
	SEM	0.52	0.17	0.35	1.06	0.23	0.18	0.12	0.166	0.27
Location 9										
Test + TSH	mean	45.2	15.9	19.7	68.4	20.0	17.0	17.4	5.61	19.5
Control	mean	44.4	15.7	19.3	66.9	19.6	17.2	17.5	5.68	19.2
	p	0.119	0.207	0.310	0.243	0.301	0.489	0.769	0.759	0.498
	SEM	0.35	0.13	0.29	0.87	0.32	0.14	0.12	0.149	0.24
Location 10										
Test + TSH	mean	44.2	15.9	19.4	66.2	19.5	16.9	17.4	5.56	19.0
Control	mean	42.5	15.4	18.3	62.0	18.9	16.6	16.8	5.34	18.5
	p	***0.039***	0.050	***0.042***	***0.024***	0.232	0.087	***0.006***	0.245	0.146
	SEM	0.59	0.18	0.36	1.32	0.38	0.16	0.17	0.153	0.25

Amino acid levels shown as milligrams per gram dry weight (mg/g DW)
Results significantly different ($p < 0.05$) are shown in bold italic type
[a] Treated with the trait-specific herbicides (TSH) mesotrione and glufosinate, $N = 4$ at all locations
[b] $N = 4$ at all locations

TABLE C-12 Seed amino acid composition: Individual-location comparison of SYHT0H2 soybean treated with trait-specific herbicides (test + TSH) and nontransgenic soybean (control) (*continued)*

Data source	Statistic	Met	Ile	Leu	Tyr	Phe	Lys	His	Arg	Trp
Location 1										
Test + TSH[a]	mean	5.02	18.3	29.0	14.8	19.6	24.3	10.1	28.0	5.62
Control[b]	mean	5.13	18.1	28.9	14.7	19.5	23.3	10.0	27.5	5.44
	p	0.447	0.579	0.803	0.587	0.764	0.196	0.777	0.478	0.266
	SEM	0.107	0.25	0.35	0.19	0.29	0.52	0.16	0.48	0.107
Location 2										
Test + TSH	mean	5.55	19.0	30.1	15.3	20.2	24.7	10.5	29.3	5.69
Control	mean	5.24	19.2	30.3	15.7	20.4	24.3	10.8	29.6	5.95
	p	0.096	0.469	0.441	0.096	0.525	0.510	0.244	0.536	***0.049***
	SEM	0.130	0.19	0.25	0.16	0.19	0.40	0.12	0.34	0.099
Location 3										
Test + TSH	mean	5.53	19.9	31.1	15.7	20.9	25.9	10.8	31.0	5.82
Control	mean	5.23	19.7	31.0	15.6	20.8	24.6	10.5	30.3	6.08
	p	0.118	0.678	0.743	0.750	0.947	0.069	0.290	0.302	***0.016***
	SEM	0.135	0.25	0.37	0.22	0.27	0.48	0.16	0.49	0.075
Location 4										
Test + TSH	mean	5.28	17.7	28.0	14.5	18.7	23.3	9.7	26.6	5.47
Control	mean	5.21	17.1	27.1	14.0	17.9	23.1	9.5	25.5	5.37
	p	0.686	0.322	0.341	0.242	0.329	0.839	0.619	0.336	0.546
	SEM	0.137	0.47	0.79	0.35	0.60	0.66	0.29	0.92	0.141

Amino acid levels shown as milligrams per gram dry weight (mg/g DW)

Results significantly different ($p < 0.05$) are shown in bold italic type

[a] Treated with the trait-specific herbicides (TSH) mesotrione and glufosinate, $N = 4$ at all locations

[b] $N = 4$ at all locations

(continued)

TABLE C-12 Seed amino acid composition: Individual-location comparison of SYHT0H2 soybean treated with trait-specific herbicides (test + TSH) and nontransgenic soybean (control) (*continued*)

Data source	Statistic	Met	Ile	Leu	Tyr	Phe	Lys	His	Arg	Trp
Location 7										
Test + TSH[a]	mean	5.11	17.5	27.6	14.3	18.4	23.5	10.1	26.4	5.64
Control[b]	mean	4.85	17.0	26.3	13.9	17.4	22.2	9.7	24.9	5.46
	p	0.327	0.395	0.213	0.449	0.165	0.121	0.100	0.215	0.308
	SEM	0.184	0.45	0.71	0.35	0.52	0.57	0.19	0.84	0.127
Location 8										
Test + TSH	mean	5.33	19.0	30.1	15.4	20.5	25.0	10.6	29.3	5.91
Control	mean	5.19	18.8	29.8	15.2	20.0	24.0	10.4	28.7	5.71
	p	0.454	0.577	0.392	0.372	0.125	***0.044***	0.254	0.245	0.220
	SEM	0.130	0.25	0.26	0.18	0.20	0.40	0.16	0.39	0.108
Location 9										
Test + TSH	mean	5.47	19.1	30.4	15.5	20.5	25.0	10.6	29.3	5.90
Control	mean	5.20	19.1	29.9	15.2	20.0	24.2	10.3	28.3	5.85
	p	0.062	0.839	0.162	0.197	***0.047***	0.248	0.135	***0.028***	0.725
	SEM	0.097	0.17	0.23	0.13	0.16	0.46	0.11	0.30	0.096
Location 10										
Test + TSH	mean	5.16	18.7	29.7	15.4	20.1	25.6	10.6	29.2	5.83
Control	mean	5.00	18.5	28.7	14.8	19.4	23.9	10.1	28.0	5.68
	p	0.500	0.557	***0.034***	***0.022***	***0.022***	***0.020***	0.077	***0.041***	0.321
	SEM	0.165	0.24	0.34	0.20	0.25	0.49	0.18	0.53	0.113

Amino acid levels shown as milligrams per gram dry weight (mg/g DW)
Results significantly different ($p < 0.05$) are shown in bold italic type
[a] Treated with the trait-specific herbicides (TSH) mesotrione and glufosinate, $N = 4$ at all locations
[b] $N = 4$ at all locations

TABLE C-13 Seed fatty acid composition: Individual-location comparison of SYHT0H2 soybean (test) and nontransgenic soybean (control)

Data source	Statistic	16:0 Palmitic	17:0 Hepta-decanoic	18:0 Stearic	18:1 Oleic	18:2 Linoleic	18:3 Linolenic	20:0 Arachidic	20:1 Eicosenoic	22:0 Behenic
Location 1										
Test[a]	mean	10.6	<LOQ–0.122	4.29	22.2	53.4	8.78	0.334	0.156	0.357
Control[b]	mean	10.0	<LOQ–0.121	4.16	21.1	55.2	8.75	0.316	0.152	0.343
	p	***<0.001***	–	0.070	***0.031***	***0.001***	0.761	***0.034***	0.284	0.081
	SEM	0.05	–	0.051	0.34	0.33	0.08	0.0057	0.0028	0.0055
Location 2										
Test	mean	10.5	<LOQ	4.82	23.5	52.6	7.63	0.364	0.166	0.353
Control	mean	9.9	<LOQ	4.58	22.7	54.2	7.73	0.340	0.164	0.336
	p	***<0.001***	–	***0.001***	***0.001***	***<0.001***	0.230	***<0.001***	0.645	***0.008***
	SEM	0.04	–	0.047	0.16	0.19	0.06	0.0041	0.0028	0.0042
Location 3										
Test	mean	10.8	<LOQ	4.18	26.0	51.6	6.49	0.337	0.203	0.368
Control	mean	10.1	<LOQ	4.16	25.7	52.6	6.53	0.333	0.201	0.351
	p	***<0.001***	–	0.829	0.801	0.295	0.780	0.755	0.857	0.088
	SEM	0.09	–	0.073	0.76	0.66	0.11	0.0095	0.0068	0.0071
Location 4										
Test	mean	10.3	<LOQ–0.107	4.46	23.8	52.6	7.82	0.350	0.187	0.360
Control	mean	9.9	<LOQ	4.32	22.5	54.5	8.04	0.326	0.177	0.346
	p	***<0.001***	–	***0.034***	***0.003***	***<0.001***	0.091	***<0.001***	0.179	***0.024***
	SEM	0.04	–	0.044	0.35	0.28	0.10	0.0038	0.0057	0.0045

Fatty acids shown as % of total fatty acids

(continued)

Results significantly different ($p < 0.05$) are shown in bold italic type. Where some or all values were < LOQ, calculation of the mean and ANOVA could not be performed so only the range is shown. Levels < LOQ were observed for all replicates at all locations for 8:0 caprylic, 10:0 capric, 12:0 lauric, 14:0 myristic, 14:1 myristoleic, 15:0 pentadecanoic, 15:1 pentadecenoic, 16:1 palmitoleic, 17:1 heptadecenoic, 18:3 gamma linolenic, 20:2 eicosadienoic, 20:3 eicosatrienoic, and 20:4 arachidonic fatty acids

[a] $N = 4$ at all locations except at Location 10 where $N = 3$ due to a missing sample

[b] $N = 4$ at all locations

TABLE C-13 Seed fatty acid composition: Individual-location comparison of SYHT0H2 soybean (test) and nontransgenic soybean (control) (*continued*)

Data source	Statistic	16:0 Palmitic	17:0 Hepta-decanoic	18:0 Stearic	18:1 Oleic	18:2 Linoleic	18:3 Linolenic	20:0 Arachidic	20:1 Eicosenoic	22:0 Behenic
Location 7										
Test[a]	mean	10.8	<LOQ	5.12	27.7	49.0	6.33	0.438	0.227	0.416
Control[b]	mean	10.4	<LOQ	5.03	25.6	51.2	6.69	0.428	0.222	0.413
	p	***0.003***	–	0.420	***0.013***	***0.005***	***0.010***	0.291	0.449	0.758
	SEM	0.08	–	0.076	0.56	0.51	0.09	0.0069	0.0049	0.0062
Location 8										
Test	mean	10.5	<LOQ	5.44	23.1	52.4	7.63	0.415	0.163	0.391
Control	mean	10.0	<LOQ	5.26	22.1	53.8	7.85	0.395	0.169	0.377
	p	***<0.001***	–	0.082	***<0.001***	***<0.001***	***0.016***	***0.026***	0.200	0.146
	SEM	0.05	–	0.077	0.17	0.24	0.07	0.0072	0.0040	0.0071
Location 9										
Test	mean	10.7	<LOQ	4.35	23.9	53.1	7.08	0.340	0.180	0.360
Control	mean	10.1	<LOQ	4.21	21.9	55.7	7.25	0.319	0.177	0.334
	p	***<0.001***	–	***0.015***	***0.001***	***<0.001***	0.163	***<0.001***	0.480	***<0.001***
	SEM	0.06	–	0.039	0.36	0.33	0.09	0.0040	0.0027	0.0045
Location 10										
Test	mean	10.2	<LOQ	4.72	24.4	52.8	6.98	0.366	0.187	0.371
Control	mean	9.7	<LOQ	4.33	22.7	55.2	7.24	0.325	0.188	0.354
	p	***<0.001***	–	***0.007***	***<0.001***	***<0.001***	***0.015***	***0.001***	0.839	0.077
	SEM	0.05, 0.05	–	0.107, 0.092	0.34, 0.31	0.34, 0.30	0.10, 0.09	0.0080, 0.0070	0.0061, 0.0052	0.0071, 0.0061

Fatty acids shown as % of total fatty acids

Results significantly different ($p < 0.05$) are shown in bold italic type. Where some or all values were < LOQ, calculation of the mean and ANOVA could not be performed so only the range is shown. Levels < LOQ were observed for all replicates at all locations for 8:0 caprylic, 10:0 capric, 12:0 lauric, 14:0 myristic, 14:1 myristoleic, 15:0 pentadecanoic, 15:1 pentadecenoic, 16:1 palmitoleic, 17:1 heptadecenoic, 18:3 gamma linolenic, 20:2 eicosadienoic, 20:3 eicosatrienoic, and 20:4 arachidonic fatty acids

[a] $N = 4$ at all locations except at Location 10 where $N = 3$ due to a missing sample

[b] $N = 4$ at all locations

TABLE C-14 Seed fatty acid composition: Individual-location comparison of SYHT0H2 soybean treated with trait-specific herbicides (test + TSH) and nontransgenic soybean (control)

Data source	Statistic	16:0 Palmitic	17:0 Hepta-decanoic	18:0 Stearic	18:1 Oleic	18:2 Linoleic	18:3 Linolenic	20:0 Arachidic	20:1 Eicosenoic	22:0 Behenic
Location 1										
Test + TSH[a]	mean	10.5	<LOQ–0.116	4.31	23.0	52.7	8.65	0.335	0.156	0.354
Control[b]	mean	10.0	<LOQ–0.121	4.16	21.1	55.2	8.75	0.316	0.152	0.343
	p	***<0.001***	–	***0.049***	***<0.001***	***<0.001***	0.339	***0.026***	0.313	0.156
	SEM	0.05	–	0.051	0.34	0.33	0.08	0.0057	0.0028	0.0055
Location 2										
Test + TSH	mean	10.6	<LOQ–0.118	4.81	23.5	52.5	7.75	0.363	0.169	0.347
Control	mean	9.9	<LOQ	4.58	22.7	54.2	7.73	0.340	0.164	0.336
	p	***<0.001***	–	***0.002***	***0.001***	***<0.001***	0.827	***<0.001***	0.242	0.082
	SEM	0.04	–	0.047	0.16	0.19	0.06	0.0041	0.0028	0.0042
Location 3										
Test + TSH	mean	10.5	<LOQ	4.48	29.3	48.3	6.41	0.378	0.209	0.393
Control	mean	10.1	<LOQ	4.16	25.7	52.6	6.53	0.333	0.201	0.351
	p	***0.002***	–	***0.004***	***0.002***	***<0.001***	0.377	***0.002***	0.427	***<0.001***
	SEM	0.09	–	0.073	0.76	0.66	0.11	0.0095	0.0068	0.0071
Location 4										
Test + TSH	mean	10.4	<LOQ–0.106	4.53	24.0	52.4	7.90	0.354	0.185	0.364
Control	mean	9.9	<LOQ	4.32	22.5	54.5	8.04	0.326	0.177	0.346
	p	***<0.001***	–	***0.002***	***0.001***	***<0.001***	0.285	***<0.001***	0.274	***0.005***
	SEM	0.04	–	0.044	0.35	0.28	0.10	0.0038	0.0057	0.0045

Fatty acids shown as % of total fatty acids

(continued)

Results significantly different ($p < 0.05$) are shown in bold italic type. Where some or all values were < LOQ, calculation of the mean and ANOVA could not be performed so only the range is shown. Levels <LOQ were observed for all replicates at all locations for 8:0 caprylic, 10:0 capric, 12:0 lauric, 14:0 myristic, 14:1 myristoleic, 15:0 pentadecanoic, 15:1 pentadecenoic, 16:1 palmitoleic, 17:1 heptadecenoic, 18:3 gamma linolenic, 20:2 eicosadienoic, 20:3 eicosatrienoic, and 20:4 arachidonic fatty acids

[a] Treated with the trait-specific herbicides (TSH) mesotrione and glufosinate, $N = 4$ at all locations

[b] $N = 4$ at all locations

TABLE C-14 Seed fatty acid composition: Individual-location comparison of SYHT0H2 soybean treated with trait-specific herbicides (test + TSH) and nontransgenic soybean (control) (continued)

Data source	Statistic	16:0 Palmitic	17:0 Hepta-decanoic	18:0 Stearic	18:1 Oleic	18:2 Linoleic	18:3 Linolenic	20:0 Arachidic	20:1 Eicosenoic	22:0 Behenic
Location 7										
Test + TSH[a]	mean	11.1	<LOQ	5.11	26.7	49.5	6.63	0.438	0.209	0.422
Control[b]	mean	10.4	<LOQ	5.03	25.6	51.2	6.69	0.428	0.222	0.413
	p	***<0.001***	–	0.448	0.165	***0.019***	0.643	0.280	***0.036***	0.304
	SEM	0.08	–	0.076	0.56	0.51	0.09	0.0069	0.0049	0.0062
Location 8										
Test + TSH	mean	10.7	<LOQ–0.120	5.30	22.2	53.0	7.76	0.411	0.169	0.385
Control	mean	10.0	<LOQ	5.26	22.1	53.8	7.85	0.395	0.169	0.377
	p	***<0.001***	–	0.676	0.528	***0.007***	0.300	0.076	0.885	0.376
	SEM	0.05	–	0.077	0.17	0.24	0.07	0.0072	0.0040	0.0071
Location 9										
Test + TSH	mean	10.8	<LOQ	4.39	24.0	52.8	7.17	0.343	0.185	0.356
Control	mean	10.1	<LOQ	4.21	21.9	55.7	7.25	0.319	0.177	0.334
	p	***<0.001***	–	***0.002***	***<0.001***	***<0.001***	0.505	***<0.001***	0.054	***0.002***
	SEM	0.06	–	0.039	0.36	0.33	0.09	0.0040	0.0027	0.0045
Location 10										
Test + TSH	mean	10.1	<LOQ	4.68	24.0	53.1	7.17	0.361	0.178	0.360
Control	mean	9.7	<LOQ	4.33	22.7	55.2	7.24	0.325	0.188	0.354
	p	***<0.001***	–	***0.009***	***<0.001***	***<0.001***	0.418	***0.001***	0.166	0.458
	SEM	0.05	–	0.092	0.31	0.30	0.09	0.0070	0.0052	0.0061

Fatty acids shown as % of total fatty acids

Results significantly different ($p < 0.05$) are shown in bold italic type. Where some or all values were < LOQ, calculation of the mean and ANOVA could not be performed so only the range is shown. Levels <LOQ were observed for all replicates at all locations for 8:0 caprylic, 10:0 capric, 12:0 lauric, 14:0 myristic, 14:1 myristoleic, 15:0 pentadecanoic, 15:1 pentadecenoic, 16:1 palmitoleic, 17:1 heptadecenoic, 18:3 gamma linolenic, 20:2 eicosadienoic, 20:3 eicosatrienoic, and 20:4 arachidonic fatty acids

[a] Treated with the trait-specific herbicides (TSH) mesotrione and glufosinate, $N = 4$ at all locations

[b] $N = 4$ at all locations

TABLE C-15 Seed anti-nutrient composition: Individual-location comparison of SYHT0H2 soybean (test) and nontransgenic soybean (control)

Data source	Statistic	Dadzein (µg/g DW)	Glycitein (µg/g DW)	Genistein (µg/g DW)	Lectin (HU/mg DW)	Phytic acid (% DW)	Raffinose (% DW)	Stachyose (% DW)	Trypsin inhibitor (TIU/mg DW)
Location 1									
Test[a]	mean	493	192	797	28.6	1.43	0.632	3.96	30.9
Control[b]	mean	426	175	770	26.3	1.46	0.602	3.61	32.9
	p	0.320	0.322	0.770	0.804	0.590	0.235	***0.018***	0.586
	SEM	46.5	11.4	64.7	6.64	0.040	0.0173	0.099	2.67
Location 2									
Test	mean	538	168	756	34.4	1.11	0.694	3.86	36.6
Control	mean	523	166	772	25.3	1.11	0.654	3.97	30.2
	p	0.753	0.910	0.625	0.155	0.914	***0.043***	0.141	0.198
	SEM	32.1	10.8	25.2	4.42	0.037	0.0147	0.050	3.54
Location 3									
Test	mean	253	175	361	23.3	1.51	1.098	3.28	40.6
Control	mean	185	152	259	35.5	1.42	1.110	3.22	42.0
	p	0.166	0.187	0.052	0.080	0.250	0.847	0.671	0.818
	SEM	33.7	12.1	35.3	5.05	0.050	0.0454	0.099	4.27
Location 4									
Test	mean	385	216	632	18.4	1.56	0.758	3.87	36.3
Control	mean	394	225	616	20.3	1.66	0.738	3.82	43.0
	p	0.851	0.696	0.701	0.752	0.094	0.445	0.641	0.251
	SEM	30.7	16.1	29.1	4.19	0.044	0.0193	0.068	4.19

(continued)

Units for anti-nutrients are shown in column headings: dry weight (DW), hemagglutinating unit (HU), trypsin inhibitor unit (TIU), microgram (µg), milligram (mg), gram (g)
Results significantly different ($p < 0.05$) are shown in bold italic type
[a] $N = 4$ at all locations except at Location 10 where $N = 3$ due to a missing sample
[b] $N = 4$ at all locations

TABLE C-15 Seed anti-nutrient composition: Individual-location comparison of SYHT0H2 soybean (test) and nontransgenic soybean (control) (*continued*)

Data source	Statistic	Dadzein (µg/g DW)	Glycitein (µg/g DW)	Genistein (µg/g DW)	Lectin (HU/mg DW)	Phytic acid (% DW)	Raffinose (% DW)	Stachyose (% DW)	Trypsin inhibitor (TIU/mg DW)
Location 7									
Test[a]	mean	170	166	180	27.3	1.88	0.937	3.55	42.0
Control[b]	mean	207	202	206	19.0	2.01	0.913	3.76	33.1
	p	0.314	0.083	0.409	0.341	0.266	0.357	0.131	0.091
	SEM	26.2	14.2	22.1	6.26	0.086	0.0207	0.094	3.60
Location 8									
Test	mean	560	181	791	21.0	1.33	0.853	3.68	34.1
Control	mean	537	220	778	23.2	1.38	0.811	3.74	33.1
	p	0.691	***0.013***	0.783	0.642	0.270	0.169	0.477	0.812
	SEM	44.1	10.5	42.0	3.27	0.039	0.0244	0.059	3.01
Location 9									
Test	mean	364	164	551	28.2	1.40	0.813	3.75	33.2
Control	mean	349	189	551	25.9	1.41	0.804	3.76	31.8
	p	0.771	0.069	0.992	0.744	0.960	0.656	0.880	0.659
	SEM	41.3	10.3	42.4	5.25	0.038	0.0138	0.038	2.26
Location 10									
Test	mean	355	184	476	27.5	0.84	0.740	4.16	33.2
Control	mean	378	237	501	31.3	0.83	0.773	3.93	29.5
	p	0.681	***0.008***	0.615	0.601	0.904	0.324	***0.018***	0.416
	SEM	40.8, 35.3	14.1, 12.2	37.6, 32.6	5.65, 4.88	0.028, 0.025	0.0257, 0.0220	0.069, 0.059	3.40, 2.94

Units for anti-nutrients are shown in column headings: dry weight (DW), hemagglutinating unit (HU), trypsin inhibitor unit (TIU), microgram (µg), milligram (mg), gram (g)
Results significantly different ($p < 0.05$) are shown in bold italic type
[a] $N = 4$ at all locations except at Location 10 where $N = 3$ due to a missing sample
[b] $N = 4$ at all locations

TABLE C-16 Seed anti-nutrient composition: Individual-location comparison of SYHT0H2 soybean treated with trait-specific herbicides (test + TSH) and nontransgenic soybean (control)

Data source	Statistic	Dadzein (µg/g DW)	Glycitein (µg/g DW)	Genistein (µg/g DW)	Lectin (HU/mg DW)	Phytic acid (% DW)	Raffinose (% DW)	Stachyose (% DW)	Trypsin inhibitor (TIU/mg DW)
Location 1									
Test + TSH[a]	mean	482	164	777	24.0	1.49	0.643	3.88	27.2
Control[b]	mean	426	175	770	26.3	1.46	0.602	3.61	32.9
	p	0.401	0.500	0.937	0.813	0.590	0.106	0.062	0.126
	SEM	46.5	11.4	64.7	6.64	0.040	0.0173	0.099	2.67
Location 2									
Test + TSH	mean	533	183	744	20.0	1.15	0.708	3.96	34.4
Control	mean	523	166	772	25.3	1.11	0.654	3.97	30.2
	p	0.825	0.270	0.398	0.406	0.335	***0.008***	0.886	0.394
	SEM	32.1	10.8	25.2	4.42	0.037	0.0147	0.050	3.54
Location 3									
Test + TSH	mean	205	168	227	26.4	1.53	1.000	2.94	38.6
Control	mean	185	152	259	35.5	1.42	1.110	3.22	42.0
	p	0.682	0.345	0.517	0.184	0.129	0.096	0.055	0.570
	SEM	33.7	12.1	35.3	5.05	0.050	0.0454	0.099	4.27
Location 4									
Test + TSH	mean	384	260	568	16.3	1.59	0.755	3.75	38.3
Control	mean	394	225	616	20.3	1.66	0.738	3.82	43.0
	p	0.824	0.137	0.257	0.506	0.228	0.516	0.454	0.412
	SEM	30.7	16.1	29.1	4.19	0.044	0.0193	0.068	4.19

(continued)

Units for anti-nutrients are shown in column headings: dry weight (DW), hemagglutinating unit (HU), trypsin inhibitor unit (TIU), microgram (µg), milligram (mg), gram (g)

Results significantly different ($p < 0.05$) are shown in bold italic type

[a] Treated with the trait-specific herbicides (TSH) mesotrione and glufosinate, $N = 4$

[b] $N = 4$ at all locations

TABLE C-16 Seed anti-nutrient composition: Individual-location comparison of SYHT0H2 soybean treated with trait-specific herbicides (test + TSH) and nontransgenic soybean (control) (*continued*)

Data source	Statistic	Dadzein (µg/g DW)	Glycitein (µg/g DW)	Genistein (µg/g DW)	Lectin (HU/mg DW)	Phytic acid (% DW)	Raffinose (% DW)	Stachyose (% DW)	Trypsin inhibitor (TIU/mg DW)
Location 7									
Test + TSH[a]	mean	228	192	202	32.7	1.87	0.930	3.71	31.0
Control[b]	mean	207	202	206	19.0	2.01	0.913	3.76	33.1
	p	0.565	0.619	0.916	0.121	0.232	0.525	0.711	0.684
	SEM	26.2	14.2	22.1	6.26	0.086	0.0207	0.094	3.60
Location 8									
Test + TSH	mean	538	181	789	21.7	1.31	0.856	3.73	37.7
Control	mean	537	220	778	23.2	1.38	0.811	3.74	33.1
	p	0.979	***0.013***	0.823	0.740	0.120	0.146	0.905	0.285
	SEM	44.1	10.5	42.0	3.27	0.039	0.0244	0.059	3.01
Location 9									
Test + TSH	mean	371	160	561	35.8	1.44	0.805	3.86	30.9
Control	mean	349	189	551	25.9	1.41	0.804	3.76	31.8
	p	0.653	***0.037***	0.834	0.165	0.457	0.958	0.053	0.786
	SEM	41.3	10.3	42.4	5.25	0.038	0.0138	0.038	2.26
Location 10									
Test + TSH	mean	424	235	515	35.9	0.85	0.743	3.94	29.5
Control	mean	378	237	501	31.3	0.83	0.773	3.93	29.5
	p	0.368	0.908	0.772	0.488	0.614	0.326	0.930	1.000
	SEM	35.3	12.2	32.6	4.88	0.025	0.0220	0.059	2.94

Units for anti-nutrients are shown in column headings: dry weight (DW), hemagglutinating unit (HU), trypsin inhibitor unit (TIU), microgram (µg), milligram (mg), gram (g)
Results significantly different ($p < 0.05$) are shown in bold italic type
[a] Treated with the trait-specific herbicides (TSH) mesotrione and glufosinate, $N = 4$
[b] $N = 4$ at all locations

APPENDIX D Analytical Phase Report: Determination of Nutrient Composition of Soybean Forage and Seed Samples Grown in the US in 2010 in Syngenta Study No. TK0027507. (Covance Study No. 8243-139)

COVANCE
THE DEVELOPMENT SERVICES COMPANY

Final Report

Study Title	Determination of Nutrient Composition of Soybean Forage and Seed Samples grown in the US in 2010 in Syngenta Study No. TK0027507
Study Director	[redacted] Covance Laboratories Inc. (Covance) 3301 Kinsman Blvd. Madison, WI 53704 [redacted]
Sponsor	Syngenta Crop Protection, LLC 410 Swing Road Post Office Box 18300 Greensboro, NC 27419
Study Monitor	[redacted] Syngenta Crop Protection, LLC 3054 East Cornwallis Road Research Triangle Park, NC 27709 [redacted]
Testing Facility	Covance Laboratories Inc. 3301 Kinsman Boulevard Madison, WI 53704
Covance Study Identification	Covance 8243-139
Syngenta Study No.	TK0055210
Report Issued	24 Jun 2011
Page Number	1 of 465

REGULATORY COMPLIANCE STATEMENT

This study was conducted in accordance with the Environmental Protection Agency (EPA) Good Laboratory Practice (GLP) Standards, 40 CFR 160 with the following exceptions:

- As the analytical phase of the study is intended for characterization of the test substances, the GLP standards as specified in section 160.135 (b) of the regulations do not apply.
- Stability of the compositional analytes in the test substance was not determined.
- For the initial thiamine hydrochloride analyses of LIMS numbers 10200214 through 10200237, documentation of standard preparation, solution identifications, critical times, etc. could not be located. This is a deviation to section 160.130(e), which requires data be recorded directly and promptly. To ensure no impact on the study, the sample analyses were rejected and the samples were retested. The raw data from the rejected analyses are maintained with the study data.

These exceptions had no effect on the integrity or quality of the study.

[redacted] 24 Jun 11
Date

Study Director
Nutritional Chemistry and Food Safety
Covance Laboratories Inc.

[redacted] 24 June 2011
Date

Study Monitor
Syngenta Crop Protection, LLC

Submitter
Syngenta Crop Protection, LLC

Date

QUALITY ASSURANCE STATEMENT

This report has been reviewed by the Quality Assurance Unit of Covance Laboratories Inc. and accurately reflects the raw data. The following study specific inspections were conducted and findings reported to the study director (SD) and associated management.

Inspection Dates			Date Reported to SD and SD Management
From	To	Phase	
28 Jan 2011	03 Feb 2011	Protocol Review-Madison	03 Feb 2011
21 Feb 2011	21 Feb 2011	Protocol Amendment Review-Madison	21 Feb 2011
28 Feb 2011	28 Feb 2011	Analytical Chemistry	28 Feb 2011
13 Apr 2011	27 Apr 2011	Data/Table Review	28 Apr 2011
16 May 2011	20 May 2011	Draft Report Review	20 May 2011
31 May 2011	01 Jun 2011	Revised Draft Report Review	01 Jun 2011
02 Jun 2011	02 Jun 2011	Protocol Amendment Review-Madison	02 Jun 2011

[redacted] 24 Jun 11
Date

Quality Assurance Unit

SIGNATURES

[redacted] 24 June 2011

Date

Study Monitor
Syngenta Crop Protection, LLC

[redacted] 24 Jun 11

Date

Study Director
Nutritional Chemistry and Food Safety
Covance Laboratories Inc.

COVANCE KEY PERSONNEL

Nutritional Chemistry and Food Safety

Vice President and General Manager

[redacted]

STUDY TIMETABLE

Study Initiation Date:	27 Jan 2011
Study Completion Date:	24 Jun 2011

PURPOSE

The purpose of this study was to perform compositional analyses of soybean forage and seed samples grown in Syngenta Trial TK0027507.

MAJOR COMPUTER SYSTEMS

The major computer systems used on this study included the following systems:

- Balance (balance weight capture system)
- PCCalc (result calculation system)
- Waters Empower® Chromatography Manager (data acquisition and result calculation system)
- Laboratory Information Management System (sample and assay tracking)
- The Metasys or REES (monitor and document facility storage conditions)
- UV-Visible ChemStation (data acquisition)
- eNotes (official study communication system)
- MADCAP (dilution calculation system)
- WINGZ (calculation of standard curve)
- ICP WinLab32 (ICP spectrometry)
- LabWare Laboratory Information Management System (NIMS) (reagent and solution preparation tracking)

TEST AND REFERENCE SUBSTANCES

Identification and Receipt

The test substances were soybean forage and seed samples grown in Syngenta study TK0027507. Three hundred and fifty two (352) soybean forage samples were received at Covance on 08 and 09 Feb 2011. Three hundred and fifty one (351) soybean seed samples were received at Covance on 09 Feb 2011. All samples were received frozen on dry ice. Each sample was labeled with a unique identifier. The samples were entered into the Covance Laboratory Information Management System (LIMS) with unique LIMS numbers. Each Syngenta sample identification was matched with the Covance LIMS information. Documentation of the samples upon receipt at Covance is maintained in the raw data.

When applicable, appropriate reference substances were used as reference standards for the analytical procedures and equipment calibrations. See Appendix A for a list of the reference standards.

Storage Conditions
Upon receipt, all test substances were stored in a freezer set to maintain -20 ±10°C, except during sample preparation or analysis.

Reference standards were stored according to vendor specifications or as deemed appropriate.

Sample Preparation
The entire amount of each sample was ground in a blender with liquid nitrogen. The blender was cleaned between samples. Any sample processing was documented in the raw data.

Characterization of Reference Standards
Certificates of analysis of the reference standards were archived at Covance. Reference standard stability (e.g., expiration, shelf life, retest date, re-certification date, or equivalent) was documented in the raw data.

Disposition
Any remaining prepared dilutions or sample extracts were discarded at Covance. Any remaining test substances will be retained at Covance for at least one year after report finalization or until final disposition is directed by the study monitor.

Any remaining reference standards may be used for other testing.

RESERVE (ARCHIVE) SAMPLES

Reserve samples were not required for a study of this design.

EXPERIMENTAL DESIGN

This study used approved analytical methods to determine the composition of the test samples. See Appendix A for a summary of the analytical methods referenced by the method mnemonic. The complete analytical methods are kept on file at Covance.

The following analyses were performed on the soybean forage samples:

Analyte	Method Mnemonic
Proximates:	
Ash	ASHM
Fat	FAAH
Moisture	M100
Protein	PGEN
Carbohydrate	CHO[1]
Acid Detergent Fiber	ADFA
Neutral Detergent fiber	NDFA

[1]Carbohydrates were quantified by calculation.

The following analyses were performed on the soybean seed samples:

Analyte	Method Mnemonic
Proximates:	
Ash	ASHM
Moisture	M100
Protein	PGEN
Total Fat	FSOX
Carbohydrate	CHO[1]
Acid Detergent Fiber	ADFA
Neutral Detergent Fiber	NDFA
Phytic Acid	PHYT
Lectins	LCTN
Raffinose	SUGT
Stachyose	SUGT
Trypsin Inhibitor	TRIP
Minerals:	
Calcium, Iron, Magnesium, Phosphorus, Potassium	ICPS
Isoflavones:	
Daidzein, Glycitein, Genistein	ISOF
Vitamins:	
Beta carotene/Vitamin A	BCLC
Thiamine hydrochloride/Vitamin B1	BIDE
Riboflavin/Vitamin B2	B2FV
Folic acid/Vitamin B9	FOAN
Phytonadione/Vitamin K1	VKTK
Total Tocopherols:	
Alpha, Beta, Delta, Gamma	TTLC
Total Tocotrienols:	
Alpha, Beta, Delta, Gamma	TOCS
Amino Acid Composition	TALC/TPLC
Fatty Acid Profile	FAPM

[1] Carbohydrates were quantified by calculation.

The samples were analyzed singly unless otherwise determined by Covance methods and/or SOPs. Quality control samples (duplicates, recoveries, certified reference standards, blanks, or validated control samples) were prepared and analyzed at Covance. Any additional analyses or re-analyses were documented and justified in the raw data.

CONTROL OF BIAS

The samples were analyzed in a non-systematic, random order to minimize assay bias. Covance determined the random order.

STATISTICAL EVALUATION

There were no statistical evaluations performed on the final tabulated results at Covance.

REPORTS

This final report was not formatted according to EPA PR Notice 86-5.

RECORD RETENTION

The raw data, documentation, records, protocol, protocol amendment, and final report for this study will be stored in the Covance archives for at least 1 year after report finalization. The Covance archives staff will contact the sponsor after at least 1 year following report finalization to determine disposition of the archived materials (except for the raw data on durable media, study correspondence, the protocol, protocol amendment, and final report which will be kept by Covance). The sponsor will then authorize the transport of the materials to their site (or that of their designee), or authorize the transport of the materials to the archive facilities of EPL Archives, Inc., Sterling, VA (EPL).

In the event the sponsor fails to indicate disposition, these materials will be transferred to the EPL storage facilities. **The sponsor will be charged a fee by EPL for the use of their archive facilities.** If the sponsor chooses to transfer materials to EPL, Covance staff will have access to those materials for continued research or regulatory audit.

The supporting records to be retained at Covance but not archived with the study data will include, but not be limited to, the following items:

1. Certificates of Analysis for reference standards
2. Durable media records
3. Employee training records
4. Instrument calibration and maintenance records
5. Storage temperature records
6. Covance Standard Operating Procedures
7. Reference standard logbooks

RESULTS

All analyte measurements are expressed on a dry weight basis except moisture and the limits of quantitation, which are expressed as fresh weight. Fatty acid results were reported both as a percent of total sample weight (on a dry weight basis) and also as percent of total fatty acids.

Tables 1 and 2 present the dry weight results for the soybean forage and seed samples, respectively. Table 3 presents the percent of total fatty acids results. The limits of quantitation are listed in Appendix A.

PROTOCOL DEVIATIONS

No protocol deviations were recorded for this study.

DRY WEIGHT CALCULATION

The calculations used to convert the analytical fresh weight results to dry weight results were as follows:

100%	– %Moisture	= DW%
DW%	÷ 100	= DWD
FWR	÷ DWD	= DWR

DW - Dry Weight
DWD - Dry Weight Decimal
FWR - Fresh Weight Result
DWR - Dry Weight Result

PERCENT OF TOTAL FATTY ACIDS CALCULATION

The fatty acid results were converted to percent of total fatty acid results. The calculation used to convert the fatty acid results to percent of total fatty acids was as follows:

$$\left(\frac{\text{Fatty Acid}}{(\text{Sum of Quantified Fatty Acids})}\right)\times 100 = \text{Fatty Acid as Percent of Total Fatty Acids}$$

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	1	1	1	1
Sample Description	L01/E01/R1	L01/E01/R2	L01/E01/R3	L01/E01/R4
Covance LIMS #	10200551	10200629	10200515	10200632
Proximate (%)				
Moisture	72.1	71.7	74.5	73.6
Protein	16.8	16.8	20.4	19.6
Total Fat	5.16	4.24	5.02	4.43
Ash	7.31	7.39	7.29	7.23
Carbohydrates	70.6	71.7	67.5	68.9
Acid Detergent Fiber (%)	25.1	24.2	25.9	31.3
Neutral Detergent Fiber (%)	28.7	34.6	33.4	33.3

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	1	1	1	1
Sample Description	L02/E01/R1	L02/E01/R2	L02/E01/R3	L02/E01/R4
Covance LIMS #	10200647	10200620	10200448	10200509
Proximate (%)				
Moisture	72.8	72.2	73.3	73.0
Protein	18.6	19.0	19.0	19.6
Total Fat	6.14	5.22	5.06	6.96
Ash	6.43	6.83	6.78	6.67
Carbohydrates	68.8	69.1	69.3	66.7
Acid Detergent Fiber (%)	35.8	29.4	29.1	27.2
Neutral Detergent Fiber (%)	35.6	30.9	31.8	34.0

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	1	1	1	1
Sample Description	L03/E01/R1	L03/E01/R2	L03/E01/R3	L03/E01/R4
Covance LIMS #	10200595	10200744	10200549	10200459
Proximate (%)				
Moisture	68.9	69.4	68.2	67.3
Protein	19.5	20.1	21.4	22.1
Total Fat	7.62	8.27	8.84	8.59
Ash	5.69	5.69	5.69	5.47
Carbohydrates	67.2	66.0	64.2	63.9
Acid Detergent Fiber (%)	28.4	25.7	27.8	28.8
Neutral Detergent Fiber (%)	29.0	29.2	34.0	32.4

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	1	1	1	1
Sample Description	L04/E01/R1	L04/E01/R2	L04/E01/R3	L04/E01/R4
Covance LIMS #	10200641	10200571	10200565	10200659
Proximate (%)				
Moisture	69.8	69.0	69.6	72.7
Protein	20.0	13.5	16.3	16.4
Total Fat	8.11	6.71	5.53	6.59
Ash	6.99	6.19	5.53	6.89
Carbohydrates	64.9	73.5	72.7	70.0
Acid Detergent Fiber (%)	22.8	29.8	27.9	27.8
Neutral Detergent Fiber (%)	30.3	33.2	29.8	36.2

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	1	1	1	1
Sample Description	L07/E01/R1	L07/E01/R2	L07/E01/R3	L07/E01/R4
Covance LIMS #	10200432	10200585	10200454	10200524
Proximate (%)				
Moisture	64.3	58.5	64.7	65.3
Protein	17.0	16.8	17.7	15.3
Total Fat	8.26	7.25	8.56	8.73
Ash	7.68	7.73	7.31	8.18
Carbohydrates	66.9	68.2	66.6	67.7
Acid Detergent Fiber (%)	28.0	29.4	27.3	27.3
Neutral Detergent Fiber (%)	34.5	35.2	35.1	34.3

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	1	1	1	1
Sample Description	L08/E01/R1	L08/E01/R2	L08/E01/R3	L08/E01/R4
Covance LIMS #	10200630	10200486	10200643	10200510
Proximate (%)				
Moisture	70.1	70.9	70.7	71.1
Protein	18.5	20.5	18.9	19.9
Total Fat	5.18	6.19	5.29	6.96
Ash	7.76	7.84	7.82	7.02
Carbohydrates	68.6	65.6	67.9	66.1
Acid Detergent Fiber (%)	25.4	28.2	22.6	27.3
Neutral Detergent Fiber (%)	26.9	33.0	29.5	35.6

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	1	1	1	1
Sample Description	L09/E01/R1	L09/E01/R2	L09/E01/R3	L09/E01/R4
Covance LIMS #	10200523	10200740	10200506	10200639
Proximate (%)				
Moisture	71.9	69.5	70.3	68.5
Protein	19.6	17.6	18.8	18.1
Total Fat	5.98	5.80	6.03	5.62
Ash	7.58	6.26	6.23	6.38
Carbohydrates	66.9	70.5	69.0	69.8
Acid Detergent Fiber (%)	26.1	31.2	25.8	24.1
Neutral Detergent Fiber (%)	29.2	36.1	34.7	28.9

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	1	1	1	1
Sample Description	L10/E01/R1	L10/E01/R2	L10/E01/R3	L10/E01/R4
Covance LIMS #	10200592	10200568	10200722	10200743
Proximate (%)				
Moisture	70.7	70.2	71.4	69.2
Protein	17.8	16.6	17.1	20.6
Total Fat	3.58	3.22	3.67	4.12
Ash	5.87	5.34	6.05	6.20
Carbohydrates	72.7	74.8	73.1	69.2
Acid Detergent Fiber (%)	27.2	25.6	26.0	25.1
Neutral Detergent Fiber (%)	37.5	31.6	31.0	35.1

Pages 20 to 35 of the Covance report contained data not relevant to the assessment of the nutritional composition of SYHT0H2 soybean and were removed.

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	6	6	6	6
Sample Description	L01/E06/R1	L01/E06/R2	L01/E06/R3	L01/E06/R4
Covance LIMS #	10200680	10200526	10200634	10200447
Proximate (%)				
Moisture	71.9	74.2	75.1	74.1
Protein	18.7	16.3	22.8	20.8
Total Fat	4.31	5.66	4.30	5.21
Ash	6.37	6.40	6.99	6.41
Carbohydrates	70.8	71.7	65.9	67.6
Acid Detergent Fiber (%)	27.2	30.2	27.7	30.1
Neutral Detergent Fiber (%)	36.3	37.9	34.9	37.7

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	6	6	6	6
Sample Description	L02/E06/R1	L02/E06/R2	L02/E06/R3	L02/E06/R4
Covance LIMS #	10200494	10200734	10200511	10200670
Proximate (%)				
Moisture	73.4	71.8	71.9	70.1
Protein	20.3	19.6	18.1	18.9
Total Fat	5.26	6.70	6.09	5.48
Ash	6.99	5.99	6.05	6.66
Carbohydrates	67.3	67.7	69.8	68.9
Acid Detergent Fiber (%)	24.5	26.8	29.8	26.6
Neutral Detergent Fiber (%)	34.2	34.8	37.4	29.2

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	6	6	6	6
Sample Description	L03/E06/R1	L03/E06/R2	L03/E06/R3	L03/E06/R4
Covance LIMS #	10200660	10200444	10200708	10200665
Proximate (%)				
Moisture	68.5	69.6	67.9	69.0
Protein	21.0	21.7	18.2	22.0
Total Fat	4.19	6.41	8.72	7.42
Ash	5.71	5.36	5.17	5.55
Carbohydrates	69.2	66.4	67.9	65.2
Acid Detergent Fiber (%)	22.4	31.9	25.9	24.8
Neutral Detergent Fiber (%)	30.0	33.9	34.6	30.6

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	6	6	6	6
Sample Description	L04/E06/R1	L04/E06/R2	L04/E06/R3	L04/E06/R4
Covance LIMS #	10200737	10200513	10200599	10200600
Proximate (%)				
Moisture	69.4	71.4	72.4	71.6
Protein	14.4	18.8	19.9	19.3
Total Fat	5.10	7.45	7.21	6.02
Ash	6.34	6.19	6.01	6.30
Carbohydrates	74.2	67.5	67.0	68.3
Acid Detergent Fiber (%)	22.2	22.0	26.4	21.7
Neutral Detergent Fiber (%)	27.8	28.5	29.7	26.5

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	6	6	6	6
Sample Description	L07/E06/R1	L07/E06/R2	L07/E06/R3	L07/E06/R4
Covance LIMS #	10200417	10200425	10200692	10200741
Proximate (%)				
Moisture	68.3	60.8	66.5	61.4
Protein	18.2	19.6	14.5	17.8
Total Fat	8.04	7.96	7.70	8.13
Ash	8.39	7.63	7.43	7.15
Carbohydrates	65.3	64.8	70.4	66.8
Acid Detergent Fiber (%)	26.5	28.8	26.3	23.3
Neutral Detergent Fiber (%)	30.6	38.5	33.1	32.9

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	6	6	6	6
Sample Description	L08/E06/R1	L08/E06/R2	L08/E06/R3	L08/E06/R4
Covance LIMS #	10200527	10200539	10200685	10200490
Proximate (%)				
Moisture	71.3	70.7	70.1	69.9
Protein	21.4	20.5	20.5	20.1
Total Fat	7.46	6.59	5.25	6.05
Ash	7.28	6.76	6.56	7.01
Carbohydrates	63.8	66.2	67.9	66.8
Acid Detergent Fiber (%)	27.1	26.1	28.0	31.9
Neutral Detergent Fiber (%)	32.5	36.2	34.4	32.7

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	6	6	6	6
Sample Description	L09/E06/R1	L09/E06/R2	L09/E06/R3	L09/E06/R4
Covance LIMS #	10200462	10200612	10200545	10200691
Proximate (%)				
Moisture	71.7	72.4	73.2	73.0
Protein	16.4	17.2	18.3	18.9
Total Fat	4.52	5.72	7.54	5.33
Ash	6.54	6.70	6.01	6.96
Carbohydrates	72.4	70.3	68.3	68.9
Acid Detergent Fiber (%)	30.7	30.1	26.8	26.4
Neutral Detergent Fiber (%)	35.7	33.4	32.3	27.6

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	6	6	6	6
Sample Description	L10/E06/R1	L10/E06/R2	L10/E06/R3	L10/E06/R4
Covance LIMS #	10200624	10200534	10200572	10200525
Proximate (%)				
Moisture	70.1	70.2	69.5	71.2
Protein	17.3	18.0	17.5	17.9
Total Fat	4.52	4.60	4.03	4.20
Ash	4.78	5.57	5.41	5.73
Carbohydrates	73.6	71.8	73.1	72.2
Acid Detergent Fiber (%)	27.3	23.3	26.0	28.1
Neutral Detergent Fiber (%)	33.0	31.2	33.1	33.3

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	7	7	7	7
Sample Description	L01/E07/R1	L01/E07/R2	L01/E07/R3	L01/E07/R4
Covance LIMS #	10200676	10200651	10200416	10200688
Proximate (%)				
Moisture	72.7	73.7	74.6	72.8
Protein	20.4	20.8	21.3	18.5
Total Fat	4.58	4.22	4.49	5.66
Ash	6.37	6.43	6.65	6.03
Carbohydrates	68.5	68.4	67.7	69.9
Acid Detergent Fiber (%)	25.6	31.8	25.0	30.5
Neutral Detergent Fiber (%)	36.4	34.5	37.1	36.0

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	7	7	7	7
Sample Description	L02/E07/R1	L02/E07/R2	L02/E07/R3	L02/E07/R4
Covance LIMS #	10200456	10200742	10200415	10200678
Proximate (%)				
Moisture	73.3	71.3	73.2	71.6
Protein	19.5	18.6	18.0	19.0
Total Fat	5.36	4.74	5.34	5.18
Ash	6.52	6.76	7.01	6.55
Carbohydrates	68.5	70.0	69.8	69.4
Acid Detergent Fiber (%)	28.0	28.4	26.7	31.5
Neutral Detergent Fiber (%)	31.2	35.2	30.9	35.6

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	7	7	7	7
Sample Description	L03/E07/R1	L03/E07/R2	L03/E07/R3	L03/E07/R4
Covance LIMS #	10200736	10200618	10200496	10200720
Proximate (%)				
Moisture	70.2	69.2	70.1	69.5
Protein	21.1	20.0	21.0	20.9
Total Fat	6.21	5.91	6.35	7.08
Ash	7.11	7.21	7.22	5.87
Carbohydrates	65.4	66.9	65.6	66.2
Acid Detergent Fiber (%)	28.2	21.8	24.9	23.5
Neutral Detergent Fiber (%)	32.8	27.0	35.1	29.9

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	7	7	7	7
Sample Description	L04/E07/R1	L04/E07/R2	L04/E07/R3	L04/E07/R4
Covance LIMS #	10200469	10200419	10200463	10200457
Proximate (%)				
Moisture	70.3	73.2	69.7	71.1
Protein	17.0	17.7	18.6	19.3
Total Fat	6.26	6.38	5.68	5.74
Ash	7.00	6.94	5.68	6.06
Carbohydrates	69.7	69.0	70.0	68.9
Acid Detergent Fiber (%)	23.0	25.3	24.7	20.6
Neutral Detergent Fiber (%)	30.9	24.3	33.7	30.9

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	7	7	7	7
Sample Description	L07/E07/R1	L07/E07/R2	L07/E07/R3	L07/E07/R4
Covance LIMS #	10200436	10200458	10200719	10200542
Proximate (%)				
Moisture	68.4	66.7	68.4	68.1
Protein	18.7	16.4	16.0	18.2
Total Fat	7.91	8.05	8.10	8.06
Ash	7.82	6.88	7.15	7.99
Carbohydrates	65.5	68.8	68.7	65.8
Acid Detergent Fiber (%)	26.8	28.2	25.1	27.0
Neutral Detergent Fiber (%)	33.2	35.4	34.5	32.9

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	7	7	7	7
Sample Description	L08/E07/R1	L08/E07/R2	L08/E07/R3	L08/E07/R4
Covance LIMS #	10200694	10200467	10200628	10200557
Proximate (%)				
Moisture	68.4	71.4	70.9	70.1
Protein	20.8	19.9	22.0	21.0
Total Fat	3.54	4.93	6.70	6.25
Ash	7.28	8.22	7.32	7.53
Carbohydrates	68.4	67.1	63.9	65.2
Acid Detergent Fiber (%)	26.6	27.6	23.0	24.9
Neutral Detergent Fiber (%)	31.1	30.7	29.9	27.1

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	7	7	7	7
Sample Description	L09/E07/R1	L09/E07/R2	L09/E07/R3	L09/E07/R4
Covance LIMS #	10200714	10200451	10200553	10200596
Proximate (%)				
Moisture	71.5	70.6	71.7	72.6
Protein	15.2	17.7	14.7	18.7
Total Fat	6.04	4.93	7.17	5.84
Ash	7.54	7.11	6.50	6.20
Carbohydrates	71.2	70.4	71.7	69.3
Acid Detergent Fiber (%)	28.8	24.6	31.1	25.7
Neutral Detergent Fiber (%)	35.8	28.1	30.6	30.4

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	7	7	7	7
Sample Description	L10/E07/R1	L10/E07/R2	L10/E07/R3	L10/E07/R4
Covance LIMS #	10200695	10200588	10200502	10200556
Proximate (%)				
Moisture	68.4	68.8	71.2	70.3
Protein	18.2	16.4	17.3	16.5
Total Fat	3.23	3.37	4.17	3.74
Ash	5.25	5.22	5.76	6.53
Carbohydrates	73.4	75.0	72.9	73.4
Acid Detergent Fiber (%)	29.0	23.8	25.0	25.8
Neutral Detergent Fiber (%)	30.8	32.1	30.7	30.4

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	8	8	8	8
Sample Description	L01/E08/R1	L01/E08/R2	L01/E08/R3	L01/E08/R4
Covance LIMS #	10200627	10200548	10200421	10200577
Proximate (%)				
Moisture	75.4	74.5	76.3	74.9
Protein	19.4	18.1	23.8	19.8
Total Fat	4.80	5.22	4.09	4.82
Ash	6.42	7.33	7.76	6.65
Carbohydrates	69.5	69.4	64.6	68.9
Acid Detergent Fiber (%)	23.3	29.4	29.5	27.7
Neutral Detergent Fiber (%)	32.0	31.4	29.7	34.2

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	8	8	8	8
Sample Description	L02/E08/R1	L02/E08/R2	L02/E08/R3	L02/E08/R4
Covance LIMS #	10200410	10200498	10200715	10200461
Proximate (%)				
Moisture	76.4	74.1	74.3	74.6
Protein	19.7	19.7	15.8	18.2
Total Fat	6.02	5.14	5.21	4.41
Ash	7.54	7.22	7.00	7.24
Carbohydrates	66.9	68.0	72.0	70.1
Acid Detergent Fiber (%)	24.2	26.9	29.2	38.3
Neutral Detergent Fiber (%)	27.6	34.4	38.9	37.0

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	8	8	8	8
Sample Description	L03/E08/R1	L03/E08/R2	L03/E08/R3	L03/E08/R4
Covance LIMS #	10200747	10200673	10200504	10200428
Proximate (%)				
Moisture	68.0	68.4	68.2	71.2
Protein	20.8	22.3	20.4	23.1
Total Fat	8.75	9.81	8.27	6.77
Ash	7.13	6.01	7.33	6.42
Carbohydrates	63.4	62.0	64.2	63.9
Acid Detergent Fiber (%)	21.8	24.7	24.2	24.1
Neutral Detergent Fiber (%)	28.7	29.7	27.5	27.0

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	8	8	8	8
Sample Description	L04/E08/R1	L04/E08/R2	L04/E08/R3	L04/E08/R4
Covance LIMS #	10200712	10200408	10200652	10200541
Proximate (%)				
Moisture	71.7	71.6	73.7	73.3
Protein	14.5	17.6	20.2	16.4
Total Fat	6.75	5.60	5.59	6.25
Ash	6.78	7.22	7.34	7.04
Carbohydrates	72.1	69.7	66.9	70.4
Acid Detergent Fiber (%)	30.4	23.9	22.9	21.6
Neutral Detergent Fiber (%)	35.7	26.3	29.5	30.5

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	8	8	8	8
Sample Description	L07/E08/R1	L07/E08/R2	L07/E08/R3	L07/E08/R4
Covance LIMS #	10200704	10200614	10200555	10200533
Proximate (%)				
Moisture	67.6	68.8	67.1	69.3
Protein	13.6	15.4	13.3	15.7
Total Fat	6.70	6.86	7.54	8.96
Ash	8.09	7.47	7.90	8.24
Carbohydrates	71.6	70.2	71.1	67.1
Acid Detergent Fiber (%)	23.8	28.8	28.8	28.5
Neutral Detergent Fiber (%)	35.2	35.3	32.8	36.8

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	8	8	8	8
Sample Description	L08/E08/R1	L08/E08/R2	L08/E08/R3	L08/E08/R4
Covance LIMS #	10200437	10200669	10200512	10200699
Proximate (%)				
Moisture	71.2	72.0	73.2	70.2
Protein	19.8	19.6	19.1	19.0
Total Fat	5.24	5.11	4.93	3.99
Ash	7.74	8.04	8.17	8.09
Carbohydrates	67.4	67.1	67.9	69.1
Acid Detergent Fiber (%)	29.5	29.9	23.5	22.8
Neutral Detergent Fiber (%)	29.6	34.3	30.3	27.3

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	8	8	8	8
Sample Description	L09/E08/R1	L09/E08/R2	L09/E08/R3	L09/E08/R4
Covance LIMS #	10200492	10200505	10200478	10200518
Proximate (%)				
Moisture	74.2	72.2	74.0	74.7
Protein	18.3	18.5	19.7	18.7
Total Fat	5.93	7.05	5.62	6.48
Ash	8.14	6.44	7.62	6.48
Carbohydrates	67.4	68.0	67.3	68.4
Acid Detergent Fiber (%)	29.6	29.0	31.0	29.0
Neutral Detergent Fiber (%)	33.0	33.1	32.4	34.0

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	8	8	8	8
Sample Description	L10/E08/R1	L10/E08/R2	L10/E08/R3	L10/E08/R4
Covance LIMS #	10200598	10200483	10200727	10200552
Proximate (%)				
Moisture	74.0	72.7	73.0	73.4
Protein	19.5	18.9	18.4	15.9
Total Fat	4.42	2.68	3.68	3.91
Ash	6.65	5.60	5.93	7.11
Carbohydrates	69.2	72.9	71.9	73.3
Acid Detergent Fiber (%)	26.1	30.8	29.5	28.9
Neutral Detergent Fiber (%)	26.3	34.8	36.8	31.8

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	9	9	9	9
Sample Description	L01/E09/R1	L01/E09/R2	L01/E09/R3	L01/E09/R4
Covance LIMS #	10200507	10200464	10200638	10200471
Proximate (%)				
Moisture	74.9	73.0	72.9	73.5
Protein	23.2	19.7	21.4	22.8
Total Fat	7.13	5.15	6.86	5.09
Ash	6.29	6.41	6.24	7.06
Carbohydrates	63.3	68.9	65.7	64.9
Acid Detergent Fiber (%)	26.8	30.4	24.9	24.5
Neutral Detergent Fiber (%)	33.9	36.7	29.9	31.9

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	9	9	9	9
Sample Description	L02/E09/R1	L02/E09/R2	L02/E09/R3	L02/E09/R4
Covance LIMS #	10200578	10200686	10200702	10200493
Proximate (%)				
Moisture	71.6	71.3	69.7	71.8
Protein	20.8	19.8	20.3	20.7
Total Fat	9.54	7.28	8.32	7.94
Ash	6.06	6.41	6.24	6.99
Carbohydrates	63.7	66.6	65.0	64.5
Acid Detergent Fiber (%)	24.9	28.0	25.8	24.9
Neutral Detergent Fiber (%)	26.3	30.1	28.5	30.9

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	9	9	9	9
Sample Description	L03/E09/R1	L03/E09/R2	L03/E09/R3	L03/E09/R4
Covance LIMS #	10200420	10200466	10200406	10200413
Proximate (%)				
Moisture	69.6	69.6	69.7	69.9
Protein	23.1	19.8	25.1	22.5
Total Fat	7.70	5.69	8.18	7.41
Ash	6.51	8.32	6.27	6.31
Carbohydrates	62.8	66.1	60.4	63.8
Acid Detergent Fiber (%)	24.9	24.9	24.5	26.9
Neutral Detergent Fiber (%)	28.2	33.2	26.3	31.1

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	9	9	9	9
Sample Description	L04/E09/R1	L04/E09/R2	L04/E09/R3	L04/E09/R4
Covance LIMS #	10200500	10200427	10200562	10200445
Proximate (%)				
Moisture	71.8	71.0	71.1	70.1
Protein	17.5	20.6	21.2	19.5
Total Fat	7.66	8.62	6.89	8.29
Ash	7.38	6.86	6.37	5.48
Carbohydrates	67.4	63.8	65.4	66.9
Acid Detergent Fiber (%)	27.0	23.8	22.5	26.1
Neutral Detergent Fiber (%)	32.7	32.5	28.6	35.8

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	9	9	9	9
Sample Description	L07/E09/R1	L07/E09/R2	L07/E09/R3	L07/E09/R4
Covance LIMS #	10200487	10200589	10200584	10200405
Proximate (%)				
Moisture	67.3	63.8	63.7	65.5
Protein	19.4	16.6	19.3	18.7
Total Fat	8.10	7.93	9.09	8.52
Ash	7.77	7.60	6.97	7.77
Carbohydrates	64.8	68.0	64.7	64.9
Acid Detergent Fiber (%)	23.6	28.5	24.7	29.6
Neutral Detergent Fiber (%)	32.1	35.6	31.1	31.9

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	9	9	9	9
Sample Description	L08/E09/R1	L08/E09/R2	L08/E09/R3	L08/E09/R4
Covance LIMS #	10200724	10200468	10200516	10200441
Proximate (%)				
Moisture	69.3	70.0	70.7	72.7
Protein	19.6	22.2	21.2	21.4
Total Fat	6.74	6.33	7.34	5.38
Ash	6.91	6.93	7.44	8.28
Carbohydrates	66.8	64.7	64.2	64.8
Acid Detergent Fiber (%)	23.1	21.8	21.8	26.9
Neutral Detergent Fiber (%)	28.5	27.8	25.0	35.3

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	9	9	9	9
Sample Description	L09/E09/R1	L09/E09/R2	L09/E09/R3	L09/E09/R4
Covance LIMS #	10200681	10200514	10200567	10200597
Proximate (%)				
Moisture	71.7	72.5	71.9	74.4
Protein	18.2	18.7	19.8	20.2
Total Fat	7.67	9.35	7.33	8.28
Ash	6.43	6.36	6.58	6.56
Carbohydrates	67.8	65.8	66.2	64.8
Acid Detergent Fiber (%)	28.3	28.8	24.8	30.0
Neutral Detergent Fiber (%)	36.7	30.7	31.5	30.1

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	9	9	9	9
Sample Description	L10/E09/R1	L10/E09/R2	L10/E09/R3	L10/E09/R4
Covance LIMS #	10200601	10200619	10200586	10200677
Proximate (%)				
Moisture	69.8	70.3	69.1	68.3
Protein	17.8	18.4	19.3	16.6
Total Fat	5.63	6.16	6.76	5.27
Ash	5.66	5.15	5.83	6.15
Carbohydrates	70.9	70.4	68.0	71.9
Acid Detergent Fiber (%)	26.7	29.8	23.5	26.3
Neutral Detergent Fiber (%)	26.8	33.3	29.6	29.9

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	10	10	10	10
Sample Description	L01/E10/R1	L01/E10/R2	L01/E10/R3	L01/E10/R4
Covance LIMS #	10200663	10200657	10200593	10200603
Proximate (%)				
Moisture	73.5	75.0	73.4	74.8
Protein	20.9	24.8	18.7	24.0
Total Fat	4.98	5.60	5.19	7.06
Ash	6.53	7.24	6.50	5.91
Carbohydrates	67.5	62.4	69.5	63.1
Acid Detergent Fiber (%)	30.2	30.8	24.4	28.0
Neutral Detergent Fiber (%)	38.9	32.2	36.1	28.7

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	10	10	10	10
Sample Description	L02/E10/R1	L02/E10/R2	L02/E10/R3	L02/E10/R4
Covance LIMS #	10200520	10200495	10200728	10200580
Proximate (%)				
Moisture	75.1	74.2	71.5	72.3
Protein	19.6	18.0	18.2	17.3
Total Fat	8.03	5.58	6.88	7.65
Ash	7.55	6.94	6.42	6.57
Carbohydrates	64.7	69.4	68.4	68.6
Acid Detergent Fiber (%)	24.9	24.3	26.1	30.4
Neutral Detergent Fiber (%)	33.5	29.7	34.1	34.0

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	10	10	10	10
Sample Description	L03/E10/R1	L03/E10/R2	L03/E10/R3	L03/E10/R4
Covance LIMS #	10200435	10200674	10200407	10200616
Proximate (%)				
Moisture	68.6	67.3	67.1	67.6
Protein	21.7	21.9	24.9	23.2
Total Fat	9.65	9.66	8.42	11.3
Ash	6.34	6.18	6.05	6.39
Carbohydrates	62.4	62.4	60.8	59.3
Acid Detergent Fiber (%)	27.7	22.1	27.7	23.4
Neutral Detergent Fiber (%)	29.6	30.4	31.9	30.6

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	10	10	10	10
Sample Description	L04/E10/R1	L04/E10/R2	L04/E10/R3	L04/E10/R4
Covance LIMS #	10200484	10200570	10200594	10200615
Proximate (%)				
Moisture	70.8	69.3	71.4	70.1
Protein	15.8	18.2	15.9	22.0
Total Fat	7.16	6.84	7.73	9.87
Ash	7.26	7.46	7.03	6.59
Carbohydrates	69.9	67.4	69.2	61.5
Acid Detergent Fiber (%)	27.5	21.6	20.5	19.6
Neutral Detergent Fiber (%)	31.7	29.2	28.0	27.2

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	10	10	10	10
Sample Description	L07/E10/R1	L07/E10/R2	L07/E10/R3	L07/E10/R4
Covance LIMS #	10200602	10200424	10200701	10200611
Proximate (%)				
Moisture	67.4	53.2	64.4	64.9
Protein	19.2	19.2	18.0	16.3
Total Fat	7.48	9.21	10.4	9.12
Ash	7.45	7.50	7.72	8.49
Carbohydrates	66.0	64.1	63.8	66.1
Acid Detergent Fiber (%)	27.6	29.7	27.8	27.4
Neutral Detergent Fiber (%)	33.1	38.5	35.7	31.6

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	10	10	10	10
Sample Description	L08/E10/R1	L08/E10/R2	L08/E10/R3	L08/E10/R4
Covance LIMS #	10200718	10200745	10200529	10200661
Proximate (%)				
Moisture	70.3	70.0	71.8	69.3
Protein	20.1	19.3	19.7	18.8
Total Fat	7.95	7.30	6.84	5.86
Ash	7.95	7.60	8.09	7.13
Carbohydrates	64.0	66.0	65.2	68.1
Acid Detergent Fiber (%)	22.8	27.1	28.8	24.1
Neutral Detergent Fiber (%)	32.7	30.5	34.5	33.2

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	10	10	10	10
Sample Description	L09/E10/R1	L09/E10/R2	L09/E10/R3	L09/E10/R4
Covance LIMS #	10200723	10200443	10200449	10200477
Proximate (%)				
Moisture	72.1	72.4	72.6	73.3
Protein	18.0	18.4	20.0	19.0
Total Fat	8.46	7.17	6.79	6.25
Ash	6.77	6.27	7.08	7.04
Carbohydrates	66.7	68.1	66.1	67.8
Acid Detergent Fiber (%)	30.3	32.8	23.3	30.0
Neutral Detergent Fiber (%)	34.0	38.0	29.1	34.9

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	10	10	10	10
Sample Description	L10/E10/R1	L10/E10/R2	L10/E10/R3	L10/E10/R4
Covance LIMS #	10200689	10200646	10200713	10200711
Proximate (%)				
Moisture	71.5	71.2	69.0	70.3
Protein	22.5	18.1	13.8	17.4
Total Fat	4.28	4.44	4.97	5.59
Ash	5.68	6.01	6.13	6.57
Carbohydrates	67.7	71.5	75.2	70.4
Acid Detergent Fiber (%)	28.0	30.5	27.0	27.6
Neutral Detergent Fiber (%)	30.2	35.1	32.3	36.0

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	11	11	11	11
Sample Description	L01/E11/R1	L01/E11/R2	L01/E11/R3	L01/E11/R4
Covance LIMS #	10200644	10200438	10200574	10200422
Proximate (%)				
Moisture	73.2	72.6	72.0	72.2
Protein	22.2	24.1	22.3	23.5
Total Fat	6.49	5.73	5.54	6.29
Ash	6.34	6.24	6.36	5.76
Carbohydrates	64.9	63.9	65.7	64.4
Acid Detergent Fiber (%)	22.8	24.2	24.4	29.6
Neutral Detergent Fiber (%)	33.0	29.6	30.4	26.1

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	11	11	11	11
Sample Description	L02/E11/R1	L02/E11/R2	L02/E11/R3	L02/E11/R4
Covance LIMS #	10200474	10200488	10200693	10200749
Proximate (%)				
Moisture	72.8	72.3	72.3	72.6
Protein	20.3	19.9	20.4	20.0
Total Fat	7.28	6.50	8.56	7.92
Ash	6.62	6.50	6.25	7.30
Carbohydrates	65.8	67.1	64.6	65.0
Acid Detergent Fiber (%)	23.3	30.9	25.4	23.8
Neutral Detergent Fiber (%)	29.4	31.9	28.7	28.8

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	11	11	11	11
Sample Description	L03/E11/R1	L03/E11/R2	L03/E11/R3	L03/E11/R4
Covance LIMS #	10200649	10200664	10200705	10200566
Proximate (%)				
Moisture	67.0	66.8	69.0	65.3
Protein	24.3	22.8	24.4	22.0
Total Fat	11.4	9.85	10.5	9.57
Ash	5.06	5.48	5.87	5.56
Carbohydrates	59.4	62.0	59.0	62.8
Acid Detergent Fiber (%)	24.9	21.9	18.4	24.2
Neutral Detergent Fiber (%)	31.8	26.4	25.1	29.7

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	11	11	11	11
Sample Description	L04/E11/R1	L04/E11/R2	L04/E11/R3	L04/E11/R4
Covance LIMS #	10200418	10200700	10200753	10200729
Proximate (%)				
Moisture	71.1	69.1	71.0	69.7
Protein	19.5	16.7	17.9	20.4
Total Fat	6.96	7.31	7.62	9.08
Ash	6.57	5.83	6.14	5.54
Carbohydrates	67.1	70.2	68.3	65.0
Acid Detergent Fiber (%)	25.8	23.6	25.9	24.8
Neutral Detergent Fiber (%)	29.8	25.2	34.5	29.9

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	11	11	11	11
Sample Description	L07/E11/R1	L07/E11/R2	L07/E11/R3	L07/E11/R4
Covance LIMS #	10200550	10200730	10200575	10200440
Proximate (%)				
Moisture	63.3	62.8	65.4	64.8
Protein	12.0	18.9	17.9	16.8
Total Fat	8.45	9.25	7.83	8.66
Ash	6.68	6.85	7.17	5.60
Carbohydrates	73.0	65.1	67.1	69.0
Acid Detergent Fiber (%)	30.0	24.0	24.7	24.9
Neutral Detergent Fiber (%)	40.6	32.3	32.9	36.1

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	11	11	11	11
Sample Description	L08/E11/R1	L08/E11/R2	L08/E11/R3	L08/E11/R4
Covance LIMS #	10200631	10200446	10200662	10200537
Proximate (%)				
Moisture	70.9	69.9	70.2	71.5
Protein	20.7	21.1	21.9	20.7
Total Fat	6.12	5.45	7.38	6.84
Ash	8.18	7.71	7.45	7.19
Carbohydrates	64.9	65.8	63.4	65.3
Acid Detergent Fiber (%)	25.2	21.1	22.6	24.0
Neutral Detergent Fiber (%)	27.6	33.1	30.9	30.4

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	11	11	11	11
Sample Description	L09/E11/R1	L09/E11/R2	L09/E11/R3	L09/E11/R4
Covance LIMS #	10200707	10200609	10200480	10200684
Proximate (%)				
Moisture	70.7	71.7	72.1	71.0
Protein	21.0	18.8	20.3	22.8
Total Fat	8.16	4.28	6.85	7.41
Ash	6.66	6.43	7.24	6.00
Carbohydrates	64.2	70.3	65.6	63.8
Acid Detergent Fiber (%)	23.0	26.8	25.2	25.4
Neutral Detergent Fiber (%)	26.1	28.4	30.0	31.0

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	11	11	11	11
Sample Description	L10/E11/R1	L10/E11/R2	L10/E11/R3	L10/E11/R4
Covance LIMS #	10200750	10200538	10200426	10200453
Proximate (%)				
Moisture	71.4	71.4	71.8	71.1
Protein	20.9	19.8	21.3	18.0
Total Fat	5.94	5.98	5.46	4.67
Ash	5.66	5.35	5.43	7.02
Carbohydrates	67.5	68.9	67.7	70.2
Acid Detergent Fiber (%)	26.6	24.2	26.2	27.3
Neutral Detergent Fiber (%)	31.1	29.0	34.8	31.8

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	12	12	12	12
Sample Description	L01/E12/R1	L01/E12/R2	L01/E12/R3	L01/E12/R4
Covance LIMS #	10200696	10200725	10200672	10200403
Proximate (%)				
Moisture	73.1	72.3	73.1	73.9
Protein	23.6	18.9	23.0	18.7
Total Fat	6.51	4.80	4.83	5.29
Ash	6.43	6.06	6.17	6.82
Carbohydrates	63.6	70.4	66.2	69.3
Acid Detergent Fiber (%)	23.1	26.7	28.0	31.8
Neutral Detergent Fiber (%)	26.2	33.9	32.6	33.4

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	12	12	12	12
Sample Description	L02/E12/R1	L02/E12/R2	L02/E12/R3	L02/E12/R4
Covance LIMS #	10200623	10200710	10200508	10200746
Proximate (%)				
Moisture	72.7	72.3	73.1	71.9
Protein	16.8	15.3	17.1	18.5
Total Fat	6.08	5.78	5.95	6.73
Ash	6.78	6.64	6.77	6.73
Carbohydrates	70.3	72.2	70.3	68.0
Acid Detergent Fiber (%)	25.7	28.1	33.3	27.4
Neutral Detergent Fiber (%)	34.8	35.7	44.2	32.2

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	12	12	12	12
Sample Description	L03/E12/R1	L03/E12/R2	L03/E12/R3	L03/E12/R4
Covance LIMS #	10200682	10200503	10200540	10200472
Proximate (%)				
Moisture	67.6	67.7	68.9	68.2
Protein	21.6	21.3	22.5	20.5
Total Fat	8.58	9.72	9.36	6.89
Ash	5.28	5.39	5.34	6.57
Carbohydrates	64.5	63.8	62.7	66.0
Acid Detergent Fiber (%)	24.2	27.1	26.0	30.9
Neutral Detergent Fiber (%)	31.2	28.4	30.2	30.9

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	12	12	12	12
Sample Description	L04/E12/R1	L04/E12/R2	L04/E12/R3	L04/E12/R4
Covance LIMS #	10200558	10200587	10200423	10200739
Proximate (%)				
Moisture	68.4	71.2	73.8	70.7
Protein	17.4	17.4	20.5	18.6
Total Fat	6.39	7.50	5.69	6.14
Ash	6.30	6.67	6.87	6.31
Carbohydrates	69.9	68.4	66.8	68.9
Acid Detergent Fiber (%)	24.4	22.3	29.9	22.5
Neutral Detergent Fiber (%)	30.2	30.0	29.7	30.5

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	12	12	12	12
Sample Description	L07/E12/R1	L07/E12/R2	L07/E12/R3	L07/E12/R4
Covance LIMS #	10200648	10200476	10200536	10200716
Proximate (%)				
Moisture	69.3	62.8	64.6	65.9
Protein	15.9	16.0	14.4	12.9
Total Fat	7.75	7.53	8.22	9.15
Ash	7.62	7.45	6.98	7.36
Carbohydrates	68.7	69.1	70.3	70.7
Acid Detergent Fiber (%)	26.8	35.5	33.6	27.0
Neutral Detergent Fiber (%)	33.6	38.7	41.0	38.1

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	12	12	12	12
Sample Description	L08/E12/R1	L08/E12/R2	L08/E12/R3	L08/E12/R4
Covance LIMS #	10200717	10200637	10200455	10200605
Proximate (%)				
Moisture	69.4	71.1	71.4	71.4
Protein	17.9	19.2	19.6	21.4
Total Fat	6.27	6.06	4.79	5.98
Ash	8.37	8.03	7.62	7.34
Carbohydrates	67.6	66.8	67.8	65.4
Acid Detergent Fiber (%)	25.4	25.8	23.0	27.4
Neutral Detergent Fiber (%)	34.3	29.8	33.5	30.2

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	12	12	12	12
Sample Description	L09/E12/R1	L09/E12/R2	L09/E12/R3	L09/E12/R4
Covance LIMS #	10200675	10200606	10200482	10200497
Proximate (%)				
Moisture	72.7	72.6	72.3	71.6
Protein	18.3	19.5	19.6	18.8
Total Fat	6.52	6.57	5.63	5.35
Ash	7.62	6.57	6.35	7.64
Carbohydrates	67.4	67.5	68.6	68.3
Acid Detergent Fiber (%)	28.9	24.8	27.5	22.0
Neutral Detergent Fiber (%)	39.2	33.0	34.0	33.1

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	12	12	12	12
Sample Description	L10/E12/R1	L10/E12/R2	L10/E12/R3	L10/E12/R4
Covance LIMS #	10200470	10200625	10200547	10200433
Proximate (%)				
Moisture	72.6	71.5	69.8	69.8
Protein	20.0	18.2	17.4	18.0
Total Fat	3.83	4.88	4.87	3.87
Ash	5.77	5.82	5.73	6.49
Carbohydrates	70.4	71.2	71.9	71.5
Acid Detergent Fiber (%)	24.2	22.9	28.0	24.4
Neutral Detergent Fiber (%)	30.5	29.1	28.4	31.4

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	13	13	13	13
Sample Description	L01/E13/R1	L01/E13/R2	L01/E13/R3	L01/E13/R4
Covance LIMS #	10200607	10200560	10200698	10200650
Proximate (%)				
Moisture	73.0	73.0	73.1	73.5
Protein	20.4	23.2	20.7	22.0
Total Fat	5.37	4.89	6.02	4.79
Ash	6.70	6.74	7.36	6.98
Carbohydrates	67.4	65.2	65.8	66.4
Acid Detergent Fiber (%)	26.4	22.9	27.7	33.7
Neutral Detergent Fiber (%)	30.9	29.6	30.7	33.9

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	13	13	13	13
Sample Description	L02/E13/R1	L02/E13/R2	L02/E13/R3	L02/E13/R4
Covance LIMS #	10200531	10200754	10200489	10200439
Proximate (%)				
Moisture	74.3	71.5	72.2	73.0
Protein	18.3	18.9	19.9	19.7
Total Fat	7.08	6.91	5.94	6.48
Ash	6.81	6.11	6.33	6.74
Carbohydrates	67.7	68.1	68.0	67.0
Acid Detergent Fiber (%)	27.2	25.0	30.2	24.9
Neutral Detergent Fiber (%)	29.9	31.6	33.2	28.0

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	13	13	13	13
Sample Description	L03/E13/R1	L03/E13/R2	L03/E13/R3	L03/E13/R4
Covance LIMS #	10200683	10200751	10200442	10200604
Proximate (%)				
Moisture	67.8	69.9	70.0	70.0
Protein	24.5	21.6	22.6	24.2
Total Fat	9.07	8.80	8.63	10.3
Ash	5.34	5.55	5.57	5.97
Carbohydrates	61.2	64.1	63.3	59.7
Acid Detergent Fiber (%)	26.4	26.2	25.8	21.6
Neutral Detergent Fiber (%)	32.0	29.9	33.2	26.6

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	13	13	13	13
Sample Description	L04/E13/R1	L04/E13/R2	L04/E13/R3	L04/E13/R4
Covance LIMS #	10200414	10200532	10200431	10200690
Proximate (%)				
Moisture	71.7	73.4	72.2	70.1
Protein	21.7	21.1	22.5	23.3
Total Fat	6.89	7.63	6.04	7.79
Ash	6.50	6.62	6.47	5.82
Carbohydrates	65.0	64.7	65.1	63.2
Acid Detergent Fiber (%)	22.4	20.6	21.4	27.1
Neutral Detergent Fiber (%)	23.0	27.2	25.9	28.8

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	13	13	13	13
Sample Description	L07/E13/R1	L07/E13/R2	L07/E13/R3	L07/E13/R4
Covance LIMS #	10200640	10200434	10200635	10200546
Proximate (%)				
Moisture	62.3	60.3	67.6	69.6
Protein	16.0	18.2	15.3	14.9
Total Fat	9.76	9.60	9.35	8.91
Ash	7.27	7.76	7.72	8.16
Carbohydrates	58.9	64.5	67.6	68.1
Acid Detergent Fiber (%)	27.3	25.4	29.1	27.7
Neutral Detergent Fiber (%)	32.6	34.3	34.6	30.0

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	13	13	13	13
Sample Description	L08/E13/R1	L08/E13/R2	L08/E13/R3	L08/E13/R4
Covance LIMS #	10200528	10200610	10200460	10200561
Proximate (%)				
Moisture	71.3	72.2	71.7	71.8
Protein	20.6	21.3	21.1	21.3
Total Fat	6.03	5.79	5.02	5.82
Ash	7.80	8.88	8.80	7.91
Carbohydrates	65.5	64.0	65.0	64.9
Acid Detergent Fiber (%)	23.4	24.1	24.2	24.3
Neutral Detergent Fiber (%)	29.3	38.5	31.3	25.6

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	13	13	13	13
Sample Description	L09/E13/R1	L09/E13/R2	L09/E13/R3	L09/E13/R4
Covance LIMS #	10200645	10200479	10200404	10200430
Proximate (%)				
Moisture	71.2	72.7	71.7	71.5
Protein	17.8	16.7	18.6	18.9
Total Fat	6.25	6.92	6.86	6.74
Ash	7.64	6.67	6.29	6.14
Carbohydrates	68.4	69.6	68.2	68.1
Acid Detergent Fiber (%)	27.7	32.2	28.3	27.1
Neutral Detergent Fiber (%)	33.6	34.1	30.6	29.9

Table 1
Compositional Analyses of Forage-Dry Weight

Entry Number	13	13	13	13
Sample Description	L10/E13/R1	L10/E13/R2	L10/E13/R3	L10/E13/R4
Covance LIMS #	10200633	10200721	10200590	10200738
Proximate (%)				
Moisture	71.9	72.2	71.3	71.7
Protein	19.8	18.8	19.4	20.5
Total Fat	4.59	4.75	4.63	3.32
Ash	5.80	5.11	6.69	7.07
Carbohydrates	69.8	71.2	69.3	69.3
Acid Detergent Fiber (%)	26.3	28.4	28.9	30.0
Neutral Detergent Fiber (%)	29.3	33.5	33.0	27.5

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	1	1	1	1
Sample Description	L01/E01/R1	L01/E01/R2	L01/E01/R3	L01/E01/R4
Covance LIMS #	10200336	10200271	10200262	10200152
Proximate (%)				
Moisture	8.15	8.29	8.16	7.76
Protein	38.2	36.1	37.8	37.4
Total Fat	19.4	19.4	18.9	19.5
Ash	5.25	8.35***	5.40	5.21
Carbohydrates	37.1	36.2	37.9	37.8
Acid Detergent Fiber (%)	15.5	15.0	14.6	12.5
Neutral Detergent Fiber (%)	16.8	15.5	19.1	14.9
Lectin (H.U./mg sample)*	26.8	33.9	18.4	25.9
Lectin (H.U./mg protein)*	76.3	102	53.0	75.1
Trypsin Inhibitor (TIU/mg)**	36.7	34.3	24.4	36.3
Phytic Acid (%)	1.44	1.33	1.51	1.56
Raffinose (%)	0.639	0.619	0.638	0.511
Stachyose (%)	3.88	3.71	3.91	2.93
Minerals (ppm)				
Calcium	2470	2910	2610	2630
Iron	76.0	840***	78.8	79.2
Magnesium	2180	2310	2240	2290
Phosphorus	6120	5990	6360	6320
Potassium	17500	17300	18100	18000
Isoflavones (mcg/g)				
Daidzein	356	448	338	563
Glycitein	171	189	159	182
Genistein	633	797	674	974
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.548	0.455	0.511	0.374
Riboflavin/Vitamin B2 (mg/100g)	0.458	0.421	0.397	0.343
Folic Acid/Vitamin B9 (mg/100g)	0.432	0.367	0.341	0.411
Phytonadione/Vitamin K1 (mcg/g)	0.425	0.374	0.352	0.504
Total Tocopherols (mg/100g)				
Alpha Tocopherol	1.16	0.934	1.24	1.25
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	19.7	15.4	19.8	16.3
Delta Tocopherol	8.35	7.08	8.18	8.45

*H.U. - Hemagglutinating Unit
***Confimed by retest; average reported.
** TIU - Trypsin Inhibitor Units

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	1	1	1	1
Sample Description	L01/E01/R1	L01/E01/R2	L01/E01/R3	L01/E01/R4
Covance LIMS #	10200336	10200271	10200262	10200152
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	43.0	41.1	43.6	44.2
Threonine	15.6	14.7	15.4	15.3
Serine	18.8	18.1	19.5	19.4
Glutamic Acid	64.9	62.0	65.7	67.2
Proline	18.4	18.2	19.3	19.3
Glycine	16.8	14.8	16.6	16.6
Alanine	17.0	16.4	17.0	16.9
Cystine	5.22	5.22	5.12	5.98
Valine	19.3	17.4	18.0	19.2
Methionine	4.89	5.23	5.12	5.27
Isoleucine	18.4	17.4	18.1	18.3
Leucine	28.9	28.1	29.2	29.3
Tyrosine	14.9	14.0	14.8	14.9
Phenylalanine	19.6	18.9	19.6	19.8
Lysine	22.6	21.5	25.2	24.0
Histidine	10.0	9.36	10.5	10.3
Arginine	28.0	26.2	28.0	27.9
Tryptophan	5.57	5.28	5.40	5.52

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	1	1	1	1
Sample Description	L01/E01/R1	L01/E01/R2	L01/E01/R3	L01/E01/R4
Covance LIMS #	10200336	10200271	10200262	10200152
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.83	1.88	1.81	1.91
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	0.0221	< LOQ	0.0231
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.770	0.772	0.761	0.781
18:1 Oleic	3.95	3.89	3.96	3.84
18:2 Linoleic	9.76	10.5	10.1	10.6
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.56	1.65	1.58	1.71
20:0 Arachidic	0.0589	0.0591	0.0579	0.0582
20:1 Eicosenoic	0.0281	0.0287	0.0277	0.0282
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0615	0.0636	0.0627	0.0662

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	1	1	1	1
Sample Description	L02/E01/R1	L02/E01/R2	L02/E01/R3	L02/E01/R4
Covance LIMS #	10200368	10200076	10200108	10200307
Proximate (%)				
Moisture	6.88	5.90	7.04	7.02
Protein	40.1	39.5	39.4	39.8
Total Fat	20.5	19.2	19.7	20.3
Ash	4.62	5.24	4.87	4.98
Carbohydrates	34.8	36.0	36.0	35.0
Acid Detergent Fiber (%)	12.6	10.3	16.7	15.9
Neutral Detergent Fiber (%)	15.4	15.0	17.1	16.5
Lectin (H.U./mg sample)*	20.6	12.6	40.9	26.9
Lectin (H.U./mg protein)*	55.3	34.0	112	72.7
Trypsin Inhibitor (TIU/mg)**	26.6	28.2	31.9	33.9
Phytic Acid (%)	1.11	1.18	1.12	1.01
Raffinose (%)	0.679	0.627	0.634	0.676
Stachyose (%)	4.02	4.01	4.03	3.80
Minerals (ppm)				
Calcium	2780	2890	2850	2910
Iron	78.5	80.6	80.5	82.1
Magnesium	2230	2360	2320	2220
Phosphorus	5050	5330	5110	4860
Potassium	17300	17900	18000	17600
Isoflavones (mcg/g)				
Daidzein	444	542	574	533
Glycitein	157	177	182	148
Genistein	708	752	823	804
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.519	0.399	0.442	0.493
Riboflavin/Vitamin B2 (mg/100g)	0.352	0.493	0.330	0.317
Folic Acid/Vitamin B9 (mg/100g)	0.492	0.545	0.478	0.418
Phytonadione/Vitamin K1 (mcg/g)	0.262	0.234	0.458	0.379
Total Tocopherols (mg/100g)				
Alpha Tocopherol	1.87	1.57	1.90	1.66
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	20.5	17.6	20.7	18.7
Delta Tocopherol	6.83	6.08	6.91	6.40

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	1	1	1	1
Sample Description	L02/E01/R1	L02/E01/R2	L02/E01/R3	L02/E01/R4
Covance LIMS #	10200368	10200076	10200108	10200307
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	46.6	45.0	45.4	45.2
Threonine	16.6	15.9	16.0	16.1
Serine	20.4	20.1	19.6	19.4
Glutamic Acid	71.4	68.9	68.0	66.8
Proline	19.9	20.0	19.8	20.6
Glycine	17.2	17.4	17.1	17.2
Alanine	17.6	17.5	17.4	17.6
Cystine	6.06	5.79	6.02	5.19
Valine	20.2	19.0	19.8	19.4
Methionine	5.15	5.27	5.09	5.43
Isoleucine	19.4	19.0	19.3	18.9
Leucine	30.6	30.1	30.4	30.2
Tyrosine	15.9	15.4	15.7	15.6
Phenylalanine	20.8	20.4	20.4	20.0
Lysine	23.1	24.0	24.8	25.2
Histidine	11.1	10.5	10.7	10.7
Arginine	29.7	29.5	29.3	29.9
Tryptophan	5.90	5.95	6.08	5.85

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	1	1	1	1
Sample Description	L02/E01/R1	L02/E01/R2	L02/E01/R3	L02/E01/R4
Covance LIMS #	10200368	10200076	10200108	10200307
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.93	1.85	1.87	1.90
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.912	0.840	0.860	0.871
18:1 Oleic	4.54	4.13	4.21	4.37
18:2 Linoleic	10.7	10.0	10.1	10.5
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.47	1.45	1.45	1.51
20:0 Arachidic	0.0679	0.0629	0.0631	0.0644
20:1 Eicosenoic	0.0325	0.0302	0.0310	0.0311
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0660	0.0628	0.0644	0.0623

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	1	1	1	1
Sample Description	L03/E01/R1	L03/E01/R2	L03/E01/R3	L03/E01/R4
Covance LIMS #	10200308	10200113	10200291	10200115
Proximate (%)				
Moisture	8.83	8.94	8.79	8.80
Protein	41.6	41.3	41.0	40.4
Total Fat	20.9	21.4	20.8	21.3
Ash	5.06	5.06	5.16	5.36
Carbohydrates	32.5	32.3	33.0	33.0
Acid Detergent Fiber (%)	16.1	17.2	12.4	14.1
Neutral Detergent Fiber (%)	16.5	16.9	17.9	15.1
Lectin (H.U./mg sample)*	21.9	44.1	26.5	49.3
Lectin (H.U./mg protein)*	57.9	118	70.9	134
Trypsin Inhibitor (TIU/mg)**	47.2	31.7	46.2	43.0
Phytic Acid (%)	1.37	1.37	1.49	1.46
Raffinose (%)	1.01	1.16	1.09	1.18
Stachyose (%)	3.35	3.21	3.11	3.19
Minerals (ppm)				
Calcium	3330	3250	3070	3080
Iron	83.3	76.5	77.2	73.1
Magnesium	2460	2590	2390	2510
Phosphorus	6350	6450	6400	6450
Potassium	16700	17000	17200	17900
Isoflavones (mcg/g)				
Daidzein	136	176	235	193
Glycitein	144	122	205	136
Genistein	248	246	272	271
Vitamins				
Beta Carotene (mg/100g)	0.128	0.208	0.206	0.195
Thiamine HCl/Vitamin B1 (mg/100g)	0.659	0.669	0.574	0.659
Riboflavin/Vitamin B2 (mg/100g)	0.400	0.385	0.411	0.306
Folic Acid/Vitamin B9 (mg/100g)	0.389	0.541	0.524	0.552
Phytonadione/Vitamin K1 (mcg/g)	0.783	0.752	0.716	0.827
Total Tocopherols (mg/100g)				
Alpha Tocopherol	3.90	3.61	3.98	4.01
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	21.3	20.0	21.6	20.7
Delta Tocopherol	4.30	4.73	4.77	4.71

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	1	1	1	1
Sample Description	L03/E01/R1	L03/E01/R2	L03/E01/R3	L03/E01/R4
Covance LIMS #	10200308	10200113	10200291	10200115
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	47.3	47.1	44.1	46.9
Threonine	16.5	16.0	15.2	16.0
Serine	20.7	20.8	19.2	20.7
Glutamic Acid	71.2	72.3	67.0	72.6
Proline	21.2	20.6	19.2	20.5
Glycine	18.0	17.7	17.3	17.5
Alanine	18.4	17.8	17.4	17.8
Cystine	5.59	6.19	5.88	6.45
Valine	20.1	19.8	18.9	20.1
Methionine	5.68	5.01	5.01	5.20
Isoleucine	19.9	19.7	19.2	20.1
Leucine	31.4	31.3	29.6	31.5
Tyrosine	16.0	15.7	14.8	15.8
Phenylalanine	21.1	21.1	19.8	21.3
Lysine	25.2	25.7	22.4	24.9
Histidine	10.7	10.6	9.92	10.8
Arginine	31.5	30.3	29.1	30.3
Tryptophan	6.02	6.33	5.76	6.22

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	1	1	1	1
Sample Description	L03/E01/R1	L03/E01/R2	L03/E01/R3	L03/E01/R4
Covance LIMS #	10200308	10200113	10200291	10200115
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.97	2.05	2.01	2.06
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.796	0.850	0.847	0.850
18:1 Oleic	5.08	5.37	5.14	5.10
18:2 Linoleic	10.6	10.8	10.4	10.6
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.28	1.31	1.32	1.35
20:0 Arachidic	0.0645	0.0673	0.0674	0.0685
20:1 Eicosenoic	0.0385	0.0418	0.0405	0.0412
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0669	0.0726	0.0704	0.0720

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	1	1	1	1
Sample Description	L04/E01/R1	L04/E01/R2	L04/E01/R3	L04/E01/R4
Covance LIMS #	10200210	10200117	10200144	10200138
Proximate (%)				
Moisture	8.70	8.16	8.52	8.34
Protein	37.0	32.2	37.9	33.5
Total Fat	20.7	22.3	19.8	22.6
Ash	5.37	5.41	5.35	5.61
Carbohydrates	36.9	40.1	36.9	38.3
Acid Detergent Fiber (%)	14.5	17.4	16.0	15.6
Neutral Detergent Fiber (%)	16.3	12.6	18.8	17.0
Lectin (H.U./mg sample)*	8.07	31.9	18.6	22.5
Lectin (H.U./mg protein)*	23.9	108	53.6	73.2
Trypsin Inhibitor (TIU/mg)**	49.5	32.0	28.7	61.9
Phytic Acid (%)	1.59	1.79	1.52	1.72
Raffinose (%)	0.733	0.761	0.735	0.722
Stachyose (%)	3.63	4.01	3.87	3.77
Minerals (ppm)				
Calcium	3180	3200	2930	3260
Iron	73.8	82.5	75.3	85.9
Magnesium	2370	2520	2430	2600
Phosphorus	6390	7080	6480	7190
Potassium	17000	18400	17500	18400
Isoflavones (mcg/g)				
Daidzein	365	364	387	458
Glycitein	179	219	225	278
Genistein	571	624	551	717
Vitamins				
Beta Carotene (mg/100g)	0.0274	0.0280	< LOQ	0.0432
Thiamine HCl/Vitamin B1 (mg/100g)	0.491	0.638	0.513	0.578
Riboflavin/Vitamin B2 (mg/100g)	0.352	0.390	0.318	0.386
Folic Acid/Vitamin B9 (mg/100g)	0.365	0.420	0.436	0.413
Phytonadione/Vitamin K1 (mcg/g)	0.288	0.172	0.267	0.599
Total Tocopherols (mg/100g)				
Alpha Tocopherol	1.60	2.00	1.27	1.56
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	19.5	24.4	15.6	19.2
Delta Tocopherol	7.33	8.14	6.43	7.38

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	1	1	1	1
Sample Description	L04/E01/R1	L04/E01/R2	L04/E01/R3	L04/E01/R4
Covance LIMS #	10200210	10200117	10200144	10200138
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	41.3	36.7	43.4	39.2
Threonine	15.2	13.5	15.5	14.1
Serine	18.4	16.4	19.2	16.9
Glutamic Acid	60.5	52.9	65.4	56.2
Proline	17.7	16.1	19.3	16.8
Glycine	16.2	14.5	16.6	15.1
Alanine	16.9	14.7	16.9	15.4
Cystine	6.10	6.06	6.15	5.98
Valine	17.7	16.1	18.5	17.1
Methionine	5.50	4.59	5.64	5.11
Isoleucine	17.6	15.8	18.1	16.9
Leucine	28.1	24.9	29.2	26.1
Tyrosine	14.3	13.0	14.9	13.6
Phenylalanine	18.8	16.0	19.6	17.2
Lysine	24.9	21.6	23.9	21.9
Histidine	10.3	8.56	10.2	8.98
Arginine	27.2	22.8	27.8	24.1
Tryptophan	5.38	5.36	5.68	5.04

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	1	1	1	1
Sample Description	L04/E01/R1	L04/E01/R2	L04/E01/R3	L04/E01/R4
Covance LIMS #	10200210	10200117	10200144	10200138
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.92	2.12	1.86	2.12
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.859	0.910	0.834	0.909
18:1 Oleic	4.39	4.67	4.48	4.67
18:2 Linoleic	10.7	11.7	10.1	11.8
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.57	1.76	1.45	1.76
20:0 Arachidic	0.0646	0.0690	0.0627	0.0683
20:1 Eicosenoic	0.0346	0.0397	0.0320	0.0375
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0690	0.0738	0.0656	0.0724

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	1	1	1	1
Sample Description	L07/E01/R1	L07/E01/R2	L07/E01/R3	L07/E01/R4
Covance LIMS #	10200148	10200133	10200317	10200382
Proximate (%)				
Moisture	7.63	7.56	7.73	7.74
Protein	35.5	33.6	36.3	33.4
Total Fat	21.4	22.6	21.7	22.8
Ash	6.12	6.62	6.06	6.10
Carbohydrates	36.9	37.1	36.0	37.7
Acid Detergent Fiber (%)	15.4	14.7	18.0	15.3
Neutral Detergent Fiber (%)	17.6	17.4	18.2	16.9
Lectin (H.U./mg sample)*	19.7	19.5	24.3	12.4
Lectin (H.U./mg protein)*	60.1	62.6	72.5	40.1
Trypsin Inhibitor (TIU/mg)**	32.9	31.3	34.8	33.4
Phytic Acid (%)	1.92	2.35	1.74	2.01
Raffinose (%)	0.909	0.877	0.916	0.948
Stachyose (%)	3.68	3.66	4.00	3.70
Minerals (ppm)				
Calcium	3120	3910	3220	3590
Iron	90.4	117	99.4	93.3
Magnesium	2760	3070	2730	2690
Phosphorus	7790	9130	7740	7830
Potassium	20600	24000	19900	20700
Isoflavones (mcg/g)				
Daidzein	253	239	171	165
Glycitein	238	195	203	173
Genistein	198	190	199	235
Vitamins				
Beta Carotene (mg/100g)	0.0811	0.107	0.105	0.103
Thiamine HCl/Vitamin B1 (mg/100g)	0.541	0.754	0.532	0.690
Riboflavin/Vitamin B2 (mg/100g)	0.403	0.546	0.400	0.465
Folic Acid/Vitamin B9 (mg/100g)	0.493	0.389	0.454	0.453
Phytonadione/Vitamin K1 (mcg/g)	0.312	0.826	0.616	0.559
Total Tocopherols (mg/100g)				
Alpha Tocopherol	5.08	5.51	5.53	6.05
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	18.5	21.6	21.6	24.2
Delta Tocopherol	3.12	3.71	3.90	4.30

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	1	1	1	1
Sample Description	L07/E01/R1	L07/E01/R2	L07/E01/R3	L07/E01/R4
Covance LIMS #	10200148	10200133	10200317	10200382
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	41.0	38.4	40.3	37.5
Threonine	14.9	14.3	15.1	14.5
Serine	18.3	17.0	18.3	17.1
Glutamic Acid	61.3	55.8	60.4	55.5
Proline	18.0	17.2	18.5	16.9
Glycine	16.0	15.1	16.0	15.2
Alanine	16.7	15.8	16.7	15.8
Cystine	6.28	5.84	5.83	6.13
Valine	17.9	17.2	18.0	16.6
Methionine	4.64	4.53	5.15	5.07
Isoleucine	17.6	16.7	17.4	16.2
Leucine	27.2	25.7	27.3	25.0
Tyrosine	14.3	13.6	14.4	13.3
Phenylalanine	18.1	17.0	17.9	16.5
Lysine	22.6	21.2	22.9	22.1
Histidine	9.98	9.56	9.87	9.20
Arginine	26.0	24.1	26.3	23.3
Tryptophan	5.58	5.29	5.61	5.35

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	1	1	1	1
Sample Description	L07/E01/R1	L07/E01/R2	L07/E01/R3	L07/E01/R4
Covance LIMS #	10200148	10200133	10200317	10200382
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.15	2.23	2.14	2.29
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	1.04	1.09	1.03	1.08
18:1 Oleic	5.28	5.67	5.30	5.32
18:2 Linoleic	10.5	10.9	10.4	11.4
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.35	1.42	1.38	1.50
20:0 Arachidic	0.0871	0.0929	0.0862	0.0943
20:1 Eicosenoic	0.0448	0.0471	0.0435	0.0524
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0836	0.0884	0.0828	0.0936

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	1	1	1	1
Sample Description	L08/E01/R1	L08/E01/R2	L08/E01/R3	L08/E01/R4
Covance LIMS #	10200321	10200289	10200151	10200081
Proximate (%)				
Moisture	12.5	12.6	12.0	11.8
Protein	44.7	39.4	38.3	39.1
Total Fat	20.8	20.4	20.7	20.2
Ash	5.21	5.07	5.49	5.24
Carbohydrates	29.3	35.2	35.6	35.5
Acid Detergent Fiber (%)	16.0	12.6	13.8	10.3
Neutral Detergent Fiber (%)	16.9	16.9	15.8	14.4
Lectin (H.U./mg sample)*	26.4	16.7	17.5	32.2
Lectin (H.U./mg protein)*	67.5	48.5	51.9	93.3
Trypsin Inhibitor (TIU/mg)**	25.9	43.0	29.3	34.1
Phytic Acid (%)	1.28	1.37	1.53	1.35
Raffinose (%)	0.832	0.823	0.799	0.789
Stachyose (%)	3.60	3.60	3.84	3.92
Minerals (ppm)				
Calcium	2470	2450	2320	2280
Iron	96.1	93.4	88.2	96.4
Magnesium	2310	2250	2350	2360
Phosphorus	5970	5930	6260	6010
Potassium	17800	18200	18200	18100
Isoflavones (mcg/g)				
Daidzein	435	503	585	624
Glycitein	221	237	234	188
Genistein	679	739	827	867
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.369	0.459	0.350	0.332
Riboflavin/Vitamin B2 (mg/100g)	0.371	0.388	0.288	0.290
Folic Acid/Vitamin B9 (mg/100g)	0.234	0.239	0.253	0.272
Phytonadione/Vitamin K1 (mcg/g)	0.416	0.429	0.282	0.143
Total Tocopherols (mg/100g)				
Alpha Tocopherol	2.57	2.51	2.14	2.00
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	18.5	17.4	17.0	17.2
Delta Tocopherol	5.89	5.54	6.05	6.69

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	1	1	1	1
Sample Description	L08/E01/R1	L08/E01/R2	L08/E01/R3	L08/E01/R4
Covance LIMS #	10200321	10200289	10200151	10200081
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	43.9	44.5	44.2	43.4
Threonine	15.9	16.0	15.7	15.8
Serine	19.5	19.2	19.5	19.7
Glutamic Acid	68.0	67.8	68.8	66.9
Proline	19.5	19.9	19.5	19.3
Glycine	16.8	17.2	16.9	17.0
Alanine	17.7	17.6	17.4	17.2
Cystine	5.21	5.84	5.80	5.44
Valine	19.2	19.6	19.5	18.4
Methionine	5.19	5.33	5.42	4.82
Isoleucine	18.7	19.6	18.6	18.4
Leucine	29.8	30.3	29.7	29.4
Tyrosine	15.3	15.3	15.2	15.0
Phenylalanine	19.7	20.3	20.1	20.0
Lysine	24.0	24.8	24.1	23.1
Histidine	10.3	10.7	10.4	10.0
Arginine	27.8	29.6	28.4	28.8
Tryptophan	5.77	5.59	5.64	5.85

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	1	1	1	1
Sample Description	L08/E01/R1	L08/E01/R2	L08/E01/R3	L08/E01/R4
Covance LIMS #	10200321	10200289	10200151	10200081
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.97	1.97	1.95	1.84
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	1.06	1.02	0.997	0.966
18:1 Oleic	4.41	4.27	4.24	4.06
18:2 Linoleic	10.4	10.4	10.5	9.99
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.55	1.52	1.57	1.39
20:0 Arachidic	0.0794	0.0778	0.0747	0.0718
20:1 Eicosenoic	0.0335	0.0349	0.0309	0.0308
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0758	0.0724	0.0735	0.0685

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	1	1	1	1
Sample Description	L09/E01/R1	L09/E01/R2	L09/E01/R3	L09/E01/R4
Covance LIMS #	10200270	10200365	10200302	10200328
Proximate (%)				
Moisture	9.61	9.60	9.76	9.36
Protein	38.5	39.5	40.0	39.6
Total Fat	21.0	20.5	20.2	20.4
Ash	5.61	5.01	5.16	5.34
Carbohydrates	34.8	35.1	34.7	34.6
Acid Detergent Fiber (%)	15.2	14.4	12.7	17.5
Neutral Detergent Fiber (%)	16.3	16.3	17.3	16.5
Lectin (H.U./mg sample)*	28.2	19.8	26.2	29.5
Lectin (H.U./mg protein)*	81.1	55.4	72.5	82.1
Trypsin Inhibitor (TIU/mg)**	32.6	29.5	35.9	29.0
Phytic Acid (%)	1.38	1.46	1.35	1.43
Raffinose (%)	0.784	0.833	0.820	0.779
Stachyose (%)	3.76	3.74	3.70	3.82
Minerals (ppm)				
Calcium	3440	3090	3360	3360
Iron	82.8	75.4	80.5	78.2
Magnesium	2530	2360	2500	2450
Phosphorus	6210	5760	5840	6160
Potassium	17500	16400	17600	18000
Isoflavones (mcg/g)				
Daidzein	388	337	352	320
Glycitein	180	189	213	173
Genistein	648	522	525	508
Vitamins				
Beta Carotene (mg/100g)	0.0366	0.0423	0.0442	0.0348
Thiamine HCl/Vitamin B1 (mg/100g)	0.544	0.487	0.545	0.460
Riboflavin/Vitamin B2 (mg/100g)	0.406	0.389	0.346	0.344
Folic Acid/Vitamin B9 (mg/100g)	0.430	0.458	0.390	0.380
Phytonadione/Vitamin K1 (mcg/g)	0.444	0.438	0.356	0.654
Total Tocopherols (mg/100g)				
Alpha Tocopherol	2.27	2.51	2.34	2.34
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	21.4	22.2	20.5	20.9
Delta Tocopherol	5.96	5.96	5.36	5.39

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	1	1	1	1
Sample Description	L09/E01/R1	L09/E01/R2	L09/E01/R3	L09/E01/R4
Covance LIMS #	10200270	10200365	10200302	10200328
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	44.0	44.2	44.3	45.2
Threonine	15.6	15.9	15.4	15.9
Serine	19.6	18.7	19.3	19.6
Glutamic Acid	65.8	66.7	66.6	68.5
Proline	19.1	19.8	19.4	19.9
Glycine	16.4	17.6	17.2	17.4
Alanine	17.4	17.4	17.7	17.4
Cystine	5.60	5.93	5.51	5.66
Valine	18.0	19.5	19.5	19.9
Methionine	5.42	5.12	5.27	4.99
Isoleucine	18.5	19.2	19.4	19.2
Leucine	29.4	29.8	30.4	30.1
Tyrosine	15.0	15.4	14.8	15.7
Phenylalanine	19.5	20.1	20.1	20.2
Lysine	24.3	23.8	25.0	23.7
Histidine	10.3	10.4	10.1	10.5
Arginine	27.9	29.3	28.1	28.0
Tryptophan	5.63	6.04	5.62	6.12

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	1	1	1	1
Sample Description	L09/E01/R1	L09/E01/R2	L09/E01/R3	L09/E01/R4
Covance LIMS #	10200270	10200365	10200302	10200328
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.02	1.96	1.94	1.96
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.826	0.833	0.824	0.794
18:1 Oleic	4.23	4.40	4.32	4.06
18:2 Linoleic	11.3	10.7	10.6	10.8
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.50	1.35	1.36	1.42
20:0 Arachidic	0.0625	0.0632	0.0621	0.0602
20:1 Eicosenoic	0.0346	0.0345	0.0342	0.0342
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0662	0.0658	0.0639	0.0640

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	1	1	1	1
Sample Description	L10/E01/R1	L10/E01/R2	L10/E01/R3	L10/E01/R4
Covance LIMS #	10200383	10200258	10200221	10200185
Proximate (%)				
Moisture	8.06	8.30	7.70	8.13
Protein	38.2	38.4	37.3	38.5
Total Fat	20.9	20.5	20.5	21.2
Ash	4.08	4.57	4.52	4.68
Carbohydrates	36.9	36.5	37.7	35.6
Acid Detergent Fiber (%)	11.0	16.9	17.7	15.5
Neutral Detergent Fiber (%)	14.9	20.0	21.3	16.3
Lectin (H.U./mg sample)*	15.1	19.0	34.9	56.1
Lectin (H.U./mg protein)*	43.1	53.9	101	158
Trypsin Inhibitor (TIU/mg)**	29.6	26.6	23.7	37.9
Phytic Acid (%)	0.780	0.865	0.801	0.881
Raffinose (%)	0.776	0.764	0.715	0.838
Stachyose (%)	3.97	3.84	3.98	3.92
Minerals (ppm)				
Calcium	2870	2910	2930	3000
Iron	76.4	93.9	72.5	76.2
Magnesium	1970	2030	2050	2090
Phosphorus	4000	4430	4200	4540
Potassium	14000	14400	15000	15700
Isoflavones (mcg/g)				
Daidzein	317	383	433	378
Glycitein	176	284	263	224
Genistein	497	509	529	469
Vitamins				
Beta Carotene (mg/100g)	0.0373	0.0267	< LOQ	0.0413
Thiamine HCl/Vitamin B1 (mg/100g)	0.756	0.636	0.650	0.502
Riboflavin/Vitamin B2 (mg/100g)	0.421	0.374	0.393	0.306
Folic Acid/Vitamin B9 (mg/100g)	0.483	0.436	0.379	0.404
Phytonadione/Vitamin K1 (mcg/g)	0.547	0.359	0.375	0.627
Total Tocopherols (mg/100g)				
Alpha Tocopherol	2.37	1.80	1.79	2.31
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	23.6	21.3	21.5	23.4
Delta Tocopherol	7.23	6.63	7.24	6.57

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	1	1	1	1
Sample Description	L10/E01/R1	L10/E01/R2	L10/E01/R3	L10/E01/R4
Covance LIMS #	10200383	10200258	10200221	10200185
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	43.0	42.9	41.6	42.3
Threonine	15.7	15.4	14.8	15.5
Serine	18.1	19.1	17.6	18.4
Glutamic Acid	62.4	64.2	60.7	60.6
Proline	19.0	18.5	19.4	18.7
Glycine	16.3	16.9	16.7	16.3
Alanine	16.8	16.9	16.6	17.0
Cystine	5.58	5.44	5.35	4.99
Valine	18.9	18.2	18.7	18.3
Methionine	5.46	4.93	5.04	4.56
Isoleucine	18.7	18.0	18.9	18.5
Leucine	28.9	28.7	28.5	28.7
Tyrosine	15.2	14.7	14.5	14.7
Phenylalanine	19.6	19.4	19.2	19.3
Lysine	22.5	23.6	24.4	25.1
Histidine	10.2	9.65	10.1	10.5
Arginine	28.0	28.0	27.7	28.1
Tryptophan	5.79	5.77	5.87	5.27

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	1	1	1	1
Sample Description	L10/E01/R1	L10/E01/R2	L10/E01/R3	L10/E01/R4
Covance LIMS #	10200383	10200258	10200221	10200185
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.91	1.86	1.91	1.85
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.852	0.854	0.855	0.817
18:1 Oleic	4.46	4.50	4.47	4.28
18:2 Linoleic	11.0	10.6	10.8	10.7
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.42	1.38	1.44	1.40
20:0 Arachidic	0.0659	0.0643	0.0618	0.0615
20:1 Eicosenoic	0.0412	0.0357	0.0352	0.0349
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0715	0.0673	0.0668	0.0703

Pages 124 to 171 of the Covance report contained data not relevant to the assessment of the nutritional composition of SYHT0H2 soybean and were removed.

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	6	6	6	6
Sample Description	L01/E06/R1	L01/E06/R2	L01/E06/R3	L01/E06/R4
Covance LIMS #	10200347	10200065	10200089	10200174
Proximate (%)				
Moisture	8.25	7.54	8.50	7.92
Protein	38.5	37.4	38.0	37.6
Total Fat	18.7	19.4	18.8	18.9
Ash	5.30	5.92	5.05	5.51
Carbohydrates	37.5	37.3	38.1	38.0
Acid Detergent Fiber (%)	12.1	12.0	15.1	15.0
Neutral Detergent Fiber (%)	15.3	15.5	17.2	17.8
Lectin (H.U./mg sample)*	12.8	23.0	33.7	44.9
Lectin (H.U./mg protein)*	36.1	66.6	96.7	129
Trypsin Inhibitor (TIU/mg)**	30.2	21.8	34.8	36.9
Phytic Acid (%)	1.43	1.46	1.32	1.51
Raffinose (%)	0.671	0.576	0.642	0.637
Stachyose (%)	4.00	3.94	3.88	4.02
Minerals (ppm)				
Calcium	2800	2640	2780	2890
Iron	74.0	145***	68.5	74.9
Magnesium	2300	2350	2400	2380
Phosphorus	6350	6140	6190	6420
Potassium	17500	17100	17700	18500
Isoflavones (mcg/g)				
Daidzein	470	438	611	452
Glycitein	229	148	176	213
Genistein	774	692	1020	700
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.523	0.280	0.392	0.552
Riboflavin/Vitamin B2 (mg/100g)	0.346	0.337	0.485	0.334
Folic Acid/Vitamin B9 (mg/100g)	0.347	0.422	0.515	0.397
Phytonadione/Vitamin K1 (mcg/g)	0.221	0.316	0.356	0.319
Total Tocopherols (mg/100g)				
Alpha Tocopherol	1.87	1.00	0.996	1.12
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	20.9	20.7	18.3	21.3
Delta Tocopherol	9.57	10.5	10.7	9.61

*H.U. - Hemagglutinating Unit
***Confimed by retest; average reported.
** TIU - Trypsin Inhibitor Units

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	6	6	6	6
Sample Description	L01/E06/R1	L01/E06/R2	L01/E06/R3	L01/E06/R4
Covance LIMS #	10200347	10200065	10200089	10200174
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	44.1	42.5	45.2	41.9
Threonine	15.7	15.4	15.7	15.1
Serine	18.2	18.6	19.7	18.6
Glutamic Acid	65.5	62.9	68.6	62.7
Proline	19.6	19.7	19.3	18.5
Glycine	17.1	16.2	16.7	16.2
Alanine	17.3	17.2	17.0	16.7
Cystine	5.20	5.16	5.56	5.01
Valine	20.2	18.4	19.2	18.7
Methionine	5.43	5.41	5.31	4.79
Isoleucine	19.4	17.8	19.0	17.8
Leucine	29.8	28.8	30.3	28.6
Tyrosine	15.1	14.9	15.4	14.7
Phenylalanine	19.8	19.7	20.7	19.0
Lysine	24.6	24.1	25.4	24.5
Histidine	10.5	10.1	10.7	9.71
Arginine	28.8	28.1	29.3	26.9
Tryptophan	5.74	5.71	5.93	5.44

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	6	6	6	6
Sample Description	L01/E06/R1	L01/E06/R2	L01/E06/R3	L01/E06/R4
Covance LIMS #	10200347	10200065	10200089	10200174
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.83	1.93	1.92	1.85
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	0.0223	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.746	0.804	0.764	0.750
18:1 Oleic	3.87	4.23	3.91	3.82
18:2 Linoleic	9.08	9.74	9.86	9.40
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.51	1.59	1.57	1.59
20:0 Arachidic	0.0584	0.0626	0.0583	0.0589
20:1 Eicosenoic	0.0272	0.0288	0.0290	0.0263
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0618	0.0673	0.0627	0.0627

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	6	6	6	6
Sample Description	L02/E06/R1	L02/E06/R2	L02/E06/R3	L02/E06/R4
Covance LIMS #	10200139	10200094	10200343	10200189
Proximate (%)				
Moisture	6.84	7.04	7.19	6.98
Protein	39.3	39.6	40.1	40.3
Total Fat	19.8	20.0	20.1	18.0
Ash	5.15	5.11	5.10	5.13
Carbohydrates	35.9	35.3	34.7	36.7
Acid Detergent Fiber (%)	13.4	12.6	13.4	14.1
Neutral Detergent Fiber (%)	15.0	15.5	16.2	15.2
Lectin (H.U./mg sample)*	15.7	46.5	42.6	32.8
Lectin (H.U./mg protein)*	42.8	126	114	87.4
Trypsin Inhibitor (TIU/mg)**	37.2	35.6	35.9	37.7
Phytic Acid (%)	1.17	1.06	1.12	1.09
Raffinose (%)	0.714	0.668	0.652	0.741
Stachyose (%)	3.77	3.87	3.98	3.82
Minerals (ppm)				
Calcium	2960	2900	2880	2880
Iron	80.7	85.6	82.4	80.5
Magnesium	2440	2260	2250	2300
Phosphorus	5440	4830	5140	5110
Potassium	17800	16800	17200	17400
Isoflavones (mcg/g)				
Daidzein	521	558	528	543
Glycitein	150	173	201	147
Genistein	735	765	759	763
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.466	0.425	0.455	0.404
Riboflavin/Vitamin B2 (mg/100g)	0.426	0.365	0.420	0.282
Folic Acid/Vitamin B9 (mg/100g)	0.523	0.522	0.523	0.429
Phytonadione/Vitamin K1 (mcg/g)	0.444	0.335	0.222	0.292
Total Tocopherols (mg/100g)				
Alpha Tocopherol	1.64	1.71	1.81	1.74
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	19.4	20.3	22.0	21.5
Delta Tocopherol	7.77	7.76	7.99	7.93

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	6	6	6	6
Sample Description	L02/E06/R1	L02/E06/R2	L02/E06/R3	L02/E06/R4
Covance LIMS #	10200139	10200094	10200343	10200189
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	44.5	46.4	45.5	44.7
Threonine	15.5	16.4	16.2	15.9
Serine	18.0	20.5	19.6	19.7
Glutamic Acid	65.4	69.8	68.9	66.3
Proline	20.3	20.3	20.0	20.1
Glycine	16.7	17.3	17.5	16.7
Alanine	17.3	17.4	17.5	17.4
Cystine	5.66	6.38	5.61	5.55
Valine	19.8	19.1	20.1	18.8
Methionine	4.80	5.01	5.32	4.99
Isoleucine	19.2	19.0	19.2	18.6
Leucine	30.1	30.6	30.3	29.8
Tyrosine	15.2	15.6	15.5	14.8
Phenylalanine	20.4	20.4	20.7	20.0
Lysine	24.9	25.9	24.8	24.4
Histidine	10.7	10.8	10.7	10.3
Arginine	29.2	29.6	29.3	28.5
Tryptophan	5.73	6.20	6.11	5.56

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	6	6	6	6
Sample Description	L02/E06/R1	L02/E06/R2	L02/E06/R3	L02/E06/R4
Covance LIMS #	10200139	10200094	10200343	10200189
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.98	1.97	1.92	1.81
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.920	0.885	0.877	0.821
18:1 Oleic	4.55	4.34	4.22	4.01
18:2 Linoleic	9.99	9.65	9.59	9.06
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.42	1.39	1.41	1.33
20:0 Arachidic	0.0693	0.0667	0.0666	0.0622
20:1 Eicosenoic	0.0320	0.0276	0.0312	0.0297
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0661	0.0649	0.0658	0.0601

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	6	6	6	6
Sample Description	L03/E06/R1	L03/E06/R2	L03/E06/R3	L03/E06/R4
Covance LIMS #	10200049	10200045	10200166	10200111
Proximate (%)				
Moisture	8.16	8.50	8.88	9.02
Protein	40.7	40.2	41.4	41.3
Total Fat	21.0	20.8	21.0	20.6
Ash	5.23	5.27	5.17	5.26
Carbohydrates	33.0	33.8	32.5	32.9
Acid Detergent Fiber (%)	14.3	12.7	13.3	14.0
Neutral Detergent Fiber (%)	15.1	16.7	15.8	15.1
Lectin (H.U./mg sample)*	22.6	15.7	12.3	42.5
Lectin (H.U./mg protein)*	60.5	42.7	32.6	113
Trypsin Inhibitor (TIU/mg)**	45.1	41.2	39.8	36.4
Phytic Acid (%)	1.54	1.55	1.48	1.45
Raffinose (%)	1.13	1.09	1.08	1.09
Stachyose (%)	3.33	3.38	3.26	3.13
Minerals (ppm)				
Calcium	3390	3580	3390	3440
Iron	80.6	82.2	73.0	74.5
Magnesium	2600	2640	2460	2580
Phosphorus	6640	6520	6120	6430
Potassium	16600	16800	16200	17300
Isoflavones (mcg/g)				
Daidzein	217	273	258	263
Glycitein	168	185	160	187
Genistein	323	405	367	348
Vitamins				
Beta Carotene (mg/100g)	0.128	0.0981	0.109	0.128
Thiamine HCl/Vitamin B1 (mg/100g)	0.659	0.650	0.599	0.577
Riboflavin/Vitamin B2 (mg/100g)	0.280	0.308	0.325	0.375
Folic Acid/Vitamin B9 (mg/100g)	0.510	0.555	0.588	0.631
Phytonadione/Vitamin K1 (mcg/g)	0.724	0.651	0.605	0.600
Total Tocopherols (mg/100g)				
Alpha Tocopherol	2.93	2.75	2.91	3.29
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	24.2	24.0	24.5	24.1
Delta Tocopherol	6.81	7.09	7.13	6.77

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	6	6	6	6
Sample Description	L03/E06/R1	L03/E06/R2	L03/E06/R3	L03/E06/R4
Covance LIMS #	10200049	10200045	10200166	10200111
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	46.2	46.8	48.5	47.9
Threonine	16.2	16.3	16.4	16.2
Serine	20.5	21.0	21.0	21.2
Glutamic Acid	71.0	70.9	74.5	74.1
Proline	21.2	21.1	21.6	21.0
Glycine	17.3	17.5	18.0	17.6
Alanine	17.9	17.9	18.7	18.0
Cystine	6.01	5.95	6.07	6.55
Valine	19.5	19.2	20.5	19.9
Methionine	5.63	5.32	5.93	5.39
Isoleucine	19.5	19.2	20.3	19.8
Leucine	31.3	31.0	32.4	31.7
Tyrosine	15.8	15.8	16.4	15.9
Phenylalanine	21.0	21.0	21.7	21.4
Lysine	26.4	26.2	26.1	25.4
Histidine	10.6	10.6	11.3	10.7
Arginine	30.7	30.5	31.9	31.0
Tryptophan	6.05	5.96	5.83	6.16

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	6	6	6	6
Sample Description	L03/E06/R1	L03/E06/R2	L03/E06/R3	L03/E06/R4
Covance LIMS #	10200049	10200045	10200166	10200111
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.97	2.12	2.07	2.11
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.763	0.817	0.792	0.838
18:1 Oleic	4.76	4.92	5.11	5.19
18:2 Linoleic	9.29	10.3	10.0	10.1
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.17	1.29	1.26	1.28
20:0 Arachidic	0.0625	0.0652	0.0641	0.0673
20:1 Eicosenoic	0.0379	0.0401	0.0382	0.0400
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0669	0.0698	0.0723	0.0736

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	6	6	6	6
Sample Description	L04/E06/R1	L04/E06/R2	L04/E06/R3	L04/E06/R4
Covance LIMS #	10200247	10200370	10200283	10200377
Proximate (%)				
Moisture	7.85	8.06	8.87	8.53
Protein	32.9	37.6	38.6	38.6
Total Fat	21.9	21.9	21.3	20.6
Ash	5.44	5.03	5.09	5.15
Carbohydrates	39.7	35.5	35.0	35.7
Acid Detergent Fiber (%)	16.4	10.0	15.3	13.4
Neutral Detergent Fiber (%)	19.6	15.2	15.9	15.1
Lectin (H.U./mg sample)*	17.1	15.4	27.8	13.2
Lectin (H.U./mg protein)*	56.5	44.6	78.9	37.5
Trypsin Inhibitor (TIU/mg)**	44.3	28.6	40.6	31.7
Phytic Acid (%)	1.68	1.52	1.51	1.53
Raffinose (%)	0.782	0.741	0.735	0.773
Stachyose (%)	4.02	3.77	3.79	3.88
Minerals (ppm)				
Calcium	3080	3060	3130	3100
Iron	79.2	72.1	77.1	79.5
Magnesium	2490	2390	2450	2390
Phosphorus	6790	6200	6640	6480
Potassium	17800	16100	16900	16300
Isoflavones (mcg/g)				
Daidzein	406	351	418	366
Glycitein	214	204	258	189
Genistein	713	593	589	632
Vitamins				
Beta Carotene (mg/100g)	0.0254	0.0263	0.0281	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.557	0.580	0.535	0.561
Riboflavin/Vitamin B2 (mg/100g)	0.467	0.425	0.406	0.438
Folic Acid/Vitamin B9 (mg/100g)	0.386	0.423	0.418	0.443
Phytonadione/Vitamin K1 (mcg/g)	0.349	0.405	0.446	0.353
Total Tocopherols (mg/100g)				
Alpha Tocopherol	1.63	1.65	1.37	1.59
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	21.6	25.0	19.6	24.5
Delta Tocopherol	8.67	10.1	8.61	9.99

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	6	6	6	6
Sample Description	L04/E06/R1	L04/E06/R2	L04/E06/R3	L04/E06/R4
Covance LIMS #	10200247	10200370	10200283	10200377
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	0.549	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	36.9	42.6	43.0	43.8
Threonine	13.7	15.4	15.4	15.9
Serine	16.3	18.7	18.7	19.6
Glutamic Acid	52.7	63.7	63.3	66.7
Proline	15.7	18.9	19.1	19.2
Glycine	14.3	16.4	16.5	17.1
Alanine	14.7	17.0	16.7	17.3
Cystine	5.50	6.09	6.32	6.34
Valine	15.8	18.7	18.7	18.9
Methionine	4.97	5.11	5.05	5.47
Isoleucine	15.7	18.2	18.7	18.7
Leucine	24.9	28.4	29.0	29.2
Tyrosine	12.9	14.8	14.7	15.2
Phenylalanine	16.2	19.0	19.3	19.2
Lysine	21.2	23.9	24.6	23.6
Histidine	8.79	10.1	10.4	10.4
Arginine	22.9	27.3	27.7	28.0
Tryptophan	4.98	5.49	5.44	5.71

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	6	6	6	6
Sample Description	L04/E06/R1	L04/E06/R2	L04/E06/R3	L04/E06/R4
Covance LIMS #	10200247	10200370	10200283	10200377
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.29	2.15	2.10	2.12
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	0.0217	0.0221	< LOQ	0.0219
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.948	0.935	0.931	0.914
18:1 Oleic	4.82	5.13	5.04	4.94
18:2 Linoleic	11.8	11.0	10.5	10.7
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.83	1.60	1.56	1.56
20:0 Arachidic	0.0741	0.0729	0.0722	0.0735
20:1 Eicosenoic	0.0413	0.0382	0.0373	0.0398
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0768	0.0753	0.0729	0.0766

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	6	6	6	6
Sample Description	L07/E06/R1	L07/E06/R2	L07/E06/R3	L07/E06/R4
Covance LIMS #	10200327	10200091	10200078	10200266
Proximate (%)				
Moisture	9.21	8.00	7.60	7.87
Protein	36.8	35.4	32.6	36.1
Total Fat	22.1	21.1	22.9	21.5
Ash	6.08	6.05	6.92	6.34
Carbohydrates	35.0	37.4	37.6	36.0
Acid Detergent Fiber (%)	16.0	14.7	13.9	18.2
Neutral Detergent Fiber (%)	17.1	18.9	16.2	19.5
Lectin (H.U./mg sample)*	31.9	15.9	44.2	17.0
Lectin (H.U./mg protein)*	95.6	48.7	147	51.1
Trypsin Inhibitor (TIU/mg)**	34.8	37.7	55.1	40.3
Phytic Acid (%)	1.77	1.84	2.14	1.75
Raffinose (%)	0.989	0.918	0.961	0.881
Stachyose (%)	3.84	3.33	3.74	3.30
Minerals (ppm)				
Calcium	3080	3500	3840	3390
Iron	88.7	99.2	109	91.5
Magnesium	2800	2920	2920	2720
Phosphorus	7490	8240	8760	7890
Potassium	19900	20500	21100	20000
Isoflavones (mcg/g)				
Daidzein	180	154	227	117
Glycitein	220	103	211	131
Genistein	214	121	232	152
Vitamins				
Beta Carotene (mg/100g)	0.113	0.135	0.109	0.110
Thiamine HCl/Vitamin B1 (mg/100g)	0.487	0.645	0.749	0.655
Riboflavin/Vitamin B2 (mg/100g)	0.409	0.451	0.521	0.487
Folic Acid/Vitamin B9 (mg/100g)	0.443	0.575	0.506	0.430
Phytonadione/Vitamin K1 (mcg/g)	0.633	0.722	0.234	0.534
Total Tocopherols (mg/100g)				
Alpha Tocopherol	2.35	5.53	4.94	6.28
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	20.9	25.2	25.9	26.8
Delta Tocopherol	5.34	5.29	6.44	5.18

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	6	6	6	6
Sample Description	L07/E06/R1	L07/E06/R2	L07/E06/R3	L07/E06/R4
Covance LIMS #	10200327	10200091	10200078	10200266
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	42.2	42.2	36.1	40.4
Threonine	15.4	15.0	13.6	14.9
Serine	18.6	17.9	17.0	18.6
Glutamic Acid	62.9	62.3	52.9	60.6
Proline	18.7	18.3	15.8	17.7
Glycine	16.6	16.4	14.5	15.4
Alanine	17.2	17.0	15.3	16.4
Cystine	5.89	6.00	6.36	5.98
Valine	18.7	18.7	15.4	17.0
Methionine	5.06	4.55	4.51	4.96
Isoleucine	18.1	18.4	15.4	16.9
Leucine	28.2	28.0	24.1	26.9
Tyrosine	14.8	14.3	12.8	13.8
Phenylalanine	18.7	18.8	15.9	17.8
Lysine	23.2	23.9	21.1	22.8
Histidine	9.91	10.2	9.05	9.96
Arginine	27.0	26.8	22.4	25.3
Tryptophan	5.78	6.07	5.28	5.24

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	6	6	6	6
Sample Description	L07/E06/R1	L07/E06/R2	L07/E06/R3	L07/E06/R4
Covance LIMS #	10200327	10200091	10200078	10200266
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.24	2.10	2.35	2.23
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	1.00	1.04	1.10	1.07
18:1 Oleic	5.28	5.77	5.68	6.03
18:2 Linoleic	10.3	9.30	10.8	9.99
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.33	1.15	1.46	1.28
20:0 Arachidic	0.0851	0.0883	0.0931	0.0946
20:1 Eicosenoic	0.0452	0.0458	0.0483	0.0480
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0811	0.0840	0.0880	0.0899

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	6	6	6	6
Sample Description	L08/E06/R1	L08/E06/R2	L08/E06/R3	L08/E06/R4
Covance LIMS #	10200198	10200319	10200208	10200364
Proximate (%)				
Moisture	11.8	11.7	12.2	12.0
Protein	40.1	38.5	39.9	39.4
Total Fat	20.1	20.0	20.4	20.5
Ash	5.17	5.01	5.06	4.81
Carbohydrates	34.6	36.5	34.7	35.3
Acid Detergent Fiber (%)	11.8	14.8	11.8	11.8
Neutral Detergent Fiber (%)	14.5	15.7	13.0	14.1
Lectin (H.U./mg sample)*	28.7	18.8	14.1	22.5
Lectin (H.U./mg protein)*	81.1	55.3	40.3	64.9
Trypsin Inhibitor (TIU/mg)**	38.0	26.2	37.7	34.5
Phytic Acid (%)	1.36	1.22	1.40	1.34
Raffinose (%)	0.838	0.860	0.884	0.830
Stachyose (%)	3.53	3.67	3.77	3.75
Minerals (ppm)				
Calcium	2570	2530	2450	2380
Iron	86.8	86.7	81.5	80.2
Magnesium	2300	2310	2350	2380
Phosphorus	6350	5820	5970	5850
Potassium	17900	16600	17500	16900
Isoflavones (mcg/g)				
Daidzein	539	512	670	517
Glycitein	226	142	200	155
Genistein	731	800	854	780
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.468	0.362	0.277	0.368
Riboflavin/Vitamin B2 (mg/100g)	0.332	0.305	0.300	0.349
Folic Acid/Vitamin B9 (mg/100g)	0.252	0.251	0.253	0.251
Phytonadione/Vitamin K1 (mcg/g)	0.266	0.280	0.181	0.249
Total Tocopherols (mg/100g)				
Alpha Tocopherol	2.46	1.93	1.87	2.30
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	21.2	20.5	19.8	22.6
Delta Tocopherol	6.88	7.89	8.11	7.89

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	6	6	6	6
Sample Description	L08/E06/R1	L08/E06/R2	L08/E06/R3	L08/E06/R4
Covance LIMS #	10200198	10200319	10200208	10200364
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	43.1	45.9	44.9	45.3
Threonine	15.6	16.5	16.1	16.4
Serine	19.0	20.2	19.8	19.4
Glutamic Acid	65.0	70.1	67.8	69.8
Proline	19.4	20.5	20.4	20.2
Glycine	17.1	17.6	17.1	18.0
Alanine	17.3	18.1	17.9	17.8
Cystine	5.10	5.40	5.48	5.98
Valine	18.7	19.8	19.1	20.0
Methionine	5.19	5.37	5.52	5.55
Isoleucine	18.4	19.0	18.7	19.7
Leucine	29.6	30.8	30.1	30.2
Tyrosine	14.7	15.7	15.1	15.3
Phenylalanine	20.3	20.8	20.5	20.3
Lysine	23.2	25.0	25.2	23.2
Histidine	10.3	10.8	10.9	10.6
Arginine	29.4	30.9	30.1	30.1
Tryptophan	5.56	5.75	5.43	6.14

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	6	6	6	6
Sample Description	L08/E06/R1	L08/E06/R2	L08/E06/R3	L08/E06/R4
Covance LIMS #	10200198	10200319	10200208	10200364
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.94	1.96	2.00	2.05
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	1.02	1.05	1.03	1.03
18:1 Oleic	4.24	4.34	4.48	4.48
18:2 Linoleic	9.65	9.74	10.1	10.3
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.42	1.44	1.47	1.47
20:0 Arachidic	0.0794	0.0794	0.0776	0.0788
20:1 Eicosenoic	0.0314	0.0300	0.0297	0.0323
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0737	0.0772	0.0726	0.0731

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	6	6	6	6
Sample Description	L09/E06/R1	L09/E06/R2	L09/E06/R3	L09/E06/R4
Covance LIMS #	10200265	10200313	10200274	10200190
Proximate (%)				
Moisture	9.50	9.60	9.27	9.09
Protein	40.6	39.8	39.6	39.9
Total Fat	20.2	20.4	21.5	20.3
Ash	5.59	5.31	5.60	5.19
Carbohydrates	33.6	34.5	33.4	34.5
Acid Detergent Fiber (%)	15.1	17.4	13.1	13.7
Neutral Detergent Fiber (%)	17.8	16.9	13.8	14.8
Lectin (H.U./mg sample)*	25.5	23.8	31.3	32.2
Lectin (H.U./mg protein)*	69.5	66.0	87.2	88.8
Trypsin Inhibitor (TIU/mg)**	27.7	31.0	31.2	42.8
Phytic Acid (%)	1.25	1.49	1.40	1.47
Raffinose (%)	0.804	0.813	0.811	0.822
Stachyose (%)	3.68	3.79	3.68	3.84
Minerals (ppm)				
Calcium	3300	3380	3370	3520
Iron	76.0	82.7	77.5	77.0
Magnesium	2530	2520	2410	2490
Phosphorus	6360	6430	6000	6160
Potassium	17100	17400	17300	17200
Isoflavones (mcg/g)				
Daidzein	345	358	407	344
Glycitein	162	169	169	154
Genistein	585	543	580	497
Vitamins				
Beta Carotene (mg/100g)	0.0307	< LOQ	0.0350	0.0309
Thiamine HCl/Vitamin B1 (mg/100g)	0.478	0.425	0.487	0.452
Riboflavin/Vitamin B2 (mg/100g)	0.367	0.399	0.396	0.381
Folic Acid/Vitamin B9 (mg/100g)	0.375	0.420	0.434	0.418
Phytonadione/Vitamin K1 (mcg/g)	0.334	0.413	0.322	0.445
Total Tocopherols (mg/100g)				
Alpha Tocopherol	2.15	2.22	2.13	2.01
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	21.9	23.3	23.8	23.2
Delta Tocopherol	7.13	7.59	7.42	7.50

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	6	6	6	6
Sample Description	L09/E06/R1	L09/E06/R2	L09/E06/R3	L09/E06/R4
Covance LIMS #	10200265	10200313	10200274	10200190
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	46.4	45.8	46.4	45.8
Threonine	16.2	16.0	16.3	16.2
Serine	20.8	20.4	21.2	20.2
Glutamic Acid	71.0	70.1	71.1	66.7
Proline	20.7	20.7	20.4	19.8
Glycine	17.2	17.4	17.4	17.4
Alanine	17.9	17.8	18.0	17.8
Cystine	5.77	5.81	5.68	5.83
Valine	19.0	19.9	18.7	19.2
Methionine	5.36	5.13	5.28	5.15
Isoleucine	19.1	19.1	19.0	19.1
Leucine	31.0	30.6	31.1	30.6
Tyrosine	15.7	15.7	15.8	15.6
Phenylalanine	20.7	20.4	20.8	20.6
Lysine	25.5	24.9	26.0	26.1
Histidine	10.7	10.7	10.5	11.0
Arginine	29.7	29.6	29.5	30.4
Tryptophan	5.58	5.75	5.61	5.39

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	6	6	6	6
Sample Description	L09/E06/R1	L09/E06/R2	L09/E06/R3	L09/E06/R4
Covance LIMS #	10200265	10200313	10200274	10200190
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.06	2.07	2.20	2.07
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.846	0.834	0.889	0.846
18:1 Oleic	4.91	4.57	4.73	4.55
18:2 Linoleic	10.2	9.97	11.4	10.3
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.34	1.34	1.50	1.40
20:0 Arachidic	0.0669	0.0648	0.0693	0.0660
20:1 Eicosenoic	0.0355	0.0341	0.0370	0.0345
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0694	0.0700	0.0721	0.0713

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	6	6	6
Sample Description	L10/E06/R1	L10/E06/R3	L10/E06/R4
Covance LIMS #	10200039	10200056	10200330
Proximate (%)			
Moisture	7.72	7.21	8.38
Protein	39.0	39.2	39.1
Total Fat	21.1	20.6	21.2
Ash	4.29	4.85	4.58
Carbohydrates	35.5	35.3	35.1
Acid Detergent Fiber (%)	11.6	13.6	15.0
Neutral Detergent Fiber (%)	14.2	15.4	16.4
Lectin (H.U./mg sample)*	24.6	23.6	37.2
Lectin (H.U./mg protein)*	68.4	64.9	104
Trypsin Inhibitor (TIU/mg)**	31.9	31.1	36.5
Phytic Acid (%)	0.839	0.819	0.851
Raffinose (%)	0.752	0.743	0.725
Stachyose (%)	4.04	4.18	4.25
Minerals (ppm)			
Calcium	2950	2880	2980
Iron	80.2	71.7	69.2
Magnesium	2100	2180	2120
Phosphorus	4500	4520	4300
Potassium	14000	15000	15400
Isoflavones (mcg/g)			
Daidzein	397	342	327
Glycitein	210	170	171
Genistein	511	402	514
Vitamins			
Beta Carotene (mg/100g)	0.0327	0.0388	0.0391
Thiamine HCl/Vitamin B1 (mg/100g)	0.591	0.638	0.563
Riboflavin/Vitamin B2 (mg/100g)	0.358	0.428	0.393
Folic Acid/Vitamin B9 (mg/100g)	0.458	0.462	0.457
Phytonadione/Vitamin K1 (mcg/g)	0.597	0.320	0.559
Total Tocopherols (mg/100g)			
Alpha Tocopherol	1.65	1.59	1.83
Beta Tocopherol	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	23.5	22.3	25.1
Delta Tocopherol	8.57	7.76	8.22

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	6	6	6
Sample Description	L10/E06/R1	L10/E06/R3	L10/E06/R4
Covance LIMS #	10200039	10200056	10200330
Total Tocotrienols (mg/100g)			
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)			
Aspartic Acid	44.6	43.0	44.9
Threonine	16.0	15.7	15.9
Serine	19.5	18.1	19.5
Glutamic Acid	65.8	63.0	68.1
Proline	19.7	20.8	20.2
Glycine	17.2	16.8	17.2
Alanine	17.7	17.6	17.5
Cystine	5.14	5.31	5.36
Valine	19.4	19.2	19.9
Methionine	4.95	4.85	5.23
Isoleucine	18.7	18.9	19.3
Leucine	30.3	29.7	29.9
Tyrosine	15.8	15.5	15.6
Phenylalanine	20.8	20.4	19.9
Lysine	25.2	26.4	24.7
Histidine	10.9	10.8	10.5
Arginine	30.3	29.5	28.7
Tryptophan	5.90	5.94	5.81

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	6	6	6
Sample Description	L10/E06/R1	L10/E06/R3	L10/E06/R4
Covance LIMS #	10200039	10200056	10200330
Fatty Acids (%)			
8:0 Caprylic	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.94	1.99	1.99
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.878	0.963	0.900
18:1 Oleic	4.58	4.90	4.62
18:2 Linoleic	10.1	10.2	10.4
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.33	1.35	1.40
20:0 Arachidic	0.0688	0.0740	0.0695
20:1 Eicosenoic	0.0354	0.0360	0.0370
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0692	0.0755	0.0705

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	7	7	7	7
Sample Description	L01/E07/R1	L01/E07/R2	L01/E07/R3	L01/E07/R4
Covance LIMS #	10200295	10200116	10200154	10200137
Proximate (%)				
Moisture	8.17	8.40	8.05	7.85
Protein	38.0	38.8	37.4	37.2
Total Fat	20.0	18.6	20.0	19.8
Ash	5.06	5.05	5.11	5.28
Carbohydrates	36.9	37.7	37.5	37.8
Acid Detergent Fiber (%)	12.8	17.9	14.1	16.1
Neutral Detergent Fiber (%)	14.9	16.8	14.7	17.3
Lectin (H.U./mg sample)*	8.31	51.7	21.0	15.0
Lectin (H.U./mg protein)*	23.8	146	61.0	43.6
Trypsin Inhibitor (TIU/mg)**	29.2	28.2	27.5	23.8
Phytic Acid (%)	1.40	1.54	1.53	1.49
Raffinose (%)	0.650	0.623	0.682	0.616
Stachyose (%)	3.65	4.06	3.93	3.88
Minerals (ppm)				
Calcium	2770	2730	2760	2630
Iron	71.0	72.2	72.4	67.4
Magnesium	2320	2490	2290	2390
Phosphorus	6090	6700	6180	6400
Potassium	17600	17900	17200	17800
Isoflavones (mcg/g)				
Daidzein	660	439	520	310
Glycitein	154	172	194	137
Genistein	1100	680	834	493
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.420	0.571	0.493	0.606
Riboflavin/Vitamin B2 (mg/100g)	0.345	0.405	0.324	0.453
Folic Acid/Vitamin B9 (mg/100g)	0.394	0.459	0.448	0.444
Phytonadione/Vitamin K1 (mcg/g)	0.218	0.139	0.381	0.420
Total Tocopherols (mg/100g)				
Alpha Tocopherol	1.05	1.12	1.02	1.25
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	20.6	21.3	18.2	19.0
Delta Tocopherol	9.78	10.4	10.7	8.67

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	7	7	7	7
Sample Description	L01/E07/R1	L01/E07/R2	L01/E07/R3	L01/E07/R4
Covance LIMS #	10200295	10200116	10200154	10200137
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	41.6	45.6	43.0	43.1
Threonine	14.7	15.9	15.1	15.1
Serine	18.3	20.2	19.2	18.4
Glutamic Acid	62.3	69.1	65.5	64.7
Proline	18.5	19.2	18.8	19.0
Glycine	16.1	17.5	16.6	16.3
Alanine	16.7	17.2	16.6	16.6
Cystine	4.95	5.95	5.89	5.17
Valine	18.3	19.5	18.8	18.7
Methionine	4.82	5.04	5.29	4.93
Isoleucine	18.0	19.0	17.8	18.2
Leucine	28.2	30.3	28.7	28.8
Tyrosine	14.0	15.6	14.8	14.8
Phenylalanine	18.8	20.5	19.5	19.6
Lysine	24.4	23.7	24.7	24.4
Histidine	9.92	10.3	10.1	10.1
Arginine	26.4	30.0	27.9	27.7
Tryptophan	5.28	5.99	5.56	5.63

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	7	7	7	7
Sample Description	L01/E07/R1	L01/E07/R2	L01/E07/R3	L01/E07/R4
Covance LIMS #	10200295	10200116	10200154	10200137
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.04	1.89	1.87	1.95
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	0.0225	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.803	0.769	0.766	0.844
18:1 Oleic	4.07	4.31	4.27	4.33
18:2 Linoleic	10.6	9.17	9.51	9.71
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.73	1.51	1.57	1.60
20:0 Arachidic	0.0608	0.0608	0.0593	0.0663
20:1 Eicosenoic	0.0287	0.0283	0.0277	0.0304
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0652	0.0641	0.0648	0.0675

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	7	7	7	7
Sample Description	L02/E07/R1	L02/E07/R2	L02/E07/R3	L02/E07/R4
Covance LIMS #	10200287	10200310	10200220	10200246
Proximate (%)				
Moisture	7.29	7.11	6.89	6.89
Protein	40.7	40.6	38.9	39.5
Total Fat	19.6	20.1	19.4	20.2
Ash	5.20	4.91	5.24	4.99
Carbohydrates	34.5	34.3	36.4	35.3
Acid Detergent Fiber (%)	11.4	14.0	15.0	15.0
Neutral Detergent Fiber (%)	16.5	14.9	18.3	19.1
Lectin (H.U./mg sample)*	17.8	19.8	22.8	19.5
Lectin (H.U./mg protein)*	47.2	52.5	62.9	53.2
Trypsin Inhibitor (TIU/mg)**	35.6	47.6	24.9	29.4
Phytic Acid (%)	1.28	1.08	1.16	1.08
Raffinose (%)	0.738	0.726	0.661	0.708
Stachyose (%)	3.95	3.94	4.01	3.92
Minerals (ppm)				
Calcium	2840	2910	2920	2730
Iron	82.2	80.3	84.3	78.8
Magnesium	2310	2240	2290	2280
Phosphorus	5780	4930	5310	5050
Potassium	18100	17400	17800	16900
Isoflavones (mcg/g)				
Daidzein	427	529	585	592
Glycitein	165	182	220	166
Genistein	645	758	764	807
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.497	0.466	0.464	0.430
Riboflavin/Vitamin B2 (mg/100g)	0.323	0.319	0.426	0.426
Folic Acid/Vitamin B9 (mg/100g)	0.335	0.395	0.438	0.451
Phytonadione/Vitamin K1 (mcg/g)	0.385	0.370	0.692	0.229
Total Tocopherols (mg/100g)				
Alpha Tocopherol	1.60	1.75	1.74	1.53
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	18.8	21.6	20.7	18.8
Delta Tocopherol	6.88	7.72	8.00	7.55

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	7	7	7	7
Sample Description	L02/E07/R1	L02/E07/R2	L02/E07/R3	L02/E07/R4
Covance LIMS #	10200287	10200310	10200220	10200246
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	44.1	46.9	44.7	44.0
Threonine	15.6	16.6	15.7	15.7
Serine	19.0	20.7	18.6	19.8
Glutamic Acid	65.8	71.2	66.4	66.3
Proline	19.4	21.4	20.0	19.0
Glycine	17.0	17.5	17.2	16.9
Alanine	17.3	18.0	17.5	17.1
Cystine	5.77	5.78	5.95	5.50
Valine	18.9	20.0	19.5	18.6
Methionine	5.21	5.73	5.55	5.72
Isoleucine	19.0	19.2	19.3	18.3
Leucine	29.7	31.1	30.1	29.3
Tyrosine	14.9	16.0	15.3	14.8
Phenylalanine	19.8	21.1	20.3	19.7
Lysine	23.5	25.1	25.9	24.1
Histidine	10.4	11.1	10.8	9.86
Arginine	28.8	31.3	29.0	28.1
Tryptophan	5.43	5.90	5.75	5.66

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	7	7	7	7
Sample Description	L02/E07/R1	L02/E07/R2	L02/E07/R3	L02/E07/R4
Covance LIMS #	10200287	10200310	10200220	10200246
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.96	2.01	1.98	2.02
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	0.0221	< LOQ	< LOQ	0.0216
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.913	0.911	0.891	0.927
18:1 Oleic	4.42	4.52	4.37	4.47
18:2 Linoleic	9.79	10.1	9.82	10.0
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.46	1.46	1.45	1.49
20:0 Arachidic	0.0699	0.0680	0.0664	0.0703
20:1 Eicosenoic	0.0324	0.0322	0.0294	0.0334
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0661	0.0658	0.0630	0.0678

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	7	7	7	7
Sample Description	L03/E07/R1	L03/E07/R2	L03/E07/R3	L03/E07/R4
Covance LIMS #	10200219	10200243	10200209	10200177
Proximate (%)				
Moisture	8.72	9.39	9.57	9.69
Protein	41.1	36.4	42.1	42.3
Total Fat	20.0	20.7	20.3	20.3
Ash	5.35	5.08	5.25	5.17
Carbohydrates	33.5	37.7	32.3	32.2
Acid Detergent Fiber (%)	16.1	13.9	15.3	13.6
Neutral Detergent Fiber (%)	17.2	16.2	15.7	14.3
Lectin (H.U./mg sample)*	37.2	27.7	12.4	28.1
Lectin (H.U./mg protein)*	99.4	84.0	32.5	73.6
Trypsin Inhibitor (TIU/mg)**	34.7	35.6	40.9	43.0
Phytic Acid (%)	1.58	1.62	1.55	1.38
Raffinose (%)	1.12	0.966	0.973	0.939
Stachyose (%)	3.07	2.95	2.72	3.00
Minerals (ppm)				
Calcium	3200	2990	3150	3380
Iron	81.8	79.4	81.5	72.4
Magnesium	2380	2450	2450	2420
Phosphorus	6780	6820	6850	5970
Potassium	17000	16600	16900	15800
Isoflavones (mcg/g)				
Daidzein	216	198	158	247
Glycitein	214	183	128	148
Genistein	233	183	168	322
Vitamins				
Beta Carotene (mg/100g)	0.198	0.221	0.257	0.114
Thiamine HCl/Vitamin B1 (mg/100g)	0.542	0.508	0.494	0.644
Riboflavin/Vitamin B2 (mg/100g)	0.369	0.509	0.383	0.318
Folic Acid/Vitamin B9 (mg/100g)	0.481	0.558	0.568	0.556
Phytonadione/Vitamin K1 (mcg/g)	0.730	0.473	0.380	0.415
Total Tocopherols (mg/100g)				
Alpha Tocopherol	4.20	4.00	3.99	3.11
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	23.0	21.7	23.0	22.9
Delta Tocopherol	6.17	6.19	6.46	7.30

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	7	7	7	7
Sample Description	L03/E07/R1	L03/E07/R2	L03/E07/R3	L03/E07/R4
Covance LIMS #	10200219	10200243	10200209	10200177
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	44.9	47.7	47.3	50.3
Threonine	15.7	16.1	16.3	16.6
Serine	19.2	20.3	21.1	21.6
Glutamic Acid	65.5	73.4	72.3	76.1
Proline	20.0	21.1	21.2	21.1
Glycine	17.2	17.8	17.9	18.4
Alanine	17.3	18.2	18.4	18.6
Cystine	6.33	6.26	6.33	5.89
Valine	19.0	21.0	19.7	20.8
Methionine	5.14	5.84	5.43	5.72
Isoleucine	19.1	20.6	19.5	20.3
Leucine	29.9	31.5	31.0	32.1
Tyrosine	15.1	15.8	15.6	16.2
Phenylalanine	20.2	20.7	20.9	21.6
Lysine	24.5	25.9	26.2	26.8
Histidine	10.6	10.5	10.9	11.0
Arginine	30.0	30.7	31.0	32.4
Tryptophan	5.93	5.77	5.64	5.95

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	7	7	7	7
Sample Description	L03/E07/R1	L03/E07/R2	L03/E07/R3	L03/E07/R4
Covance LIMS #	10200219	10200243	10200209	10200177
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.02	2.09	2.02	2.00
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.867	0.905	0.882	0.808
18:1 Oleic	5.70	5.84	5.61	5.53
18:2 Linoleic	9.21	9.55	9.37	9.22
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.17	1.28	1.28	1.22
20:0 Arachidic	0.0716	0.0774	0.0755	0.0681
20:1 Eicosenoic	0.0388	0.0425	0.0408	0.0394
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0730	0.0775	0.0757	0.0780

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	7	7	7	7
Sample Description	L04/E07/R1	L04/E07/R2	L04/E07/R3	L04/E07/R4
Covance LIMS #	10200378	10200357	10200071	10200276
Proximate (%)				
Moisture	8.17	8.32	7.53	8.49
Protein	33.6	35.3	38.5	38.9
Total Fat	22.4	21.9	20.8	21.5
Ash	5.18	5.15	5.42	5.41
Carbohydrates	38.8	37.6	35.4	34.2
Acid Detergent Fiber (%)	12.3	14.3	12.4	14.6
Neutral Detergent Fiber (%)	16.8	16.7	14.0	15.2
Lectin (H.U./mg sample)*	12.5	16.5	12.5	23.6
Lectin (H.U./mg protein)*	40.5	50.8	35.3	66.3
Trypsin Inhibitor (TIU/mg)**	44.3	35.9	35.5	37.3
Phytic Acid (%)	1.62	1.71	1.51	1.51
Raffinose (%)	0.799	0.764	0.689	0.767
Stachyose (%)	3.81	3.77	3.68	3.73
Minerals (ppm)				
Calcium	3030	2950	2820	2980
Iron	77.6	79.2	74.4	76.6
Magnesium	2410	2470	2330	2400
Phosphorus	6500	6890	6190	6440
Potassium	16900	17200	16000	16800
Isoflavones (mcg/g)				
Daidzein	364	426	382	363
Glycitein	280	340	201	220
Genistein	575	638	546	513
Vitamins				
Beta Carotene (mg/100g)	0.0346	< LOQ	0.0239	0.0319
Thiamine HCl/Vitamin B1 (mg/100g)	0.696	0.629	0.496	0.573
Riboflavin/Vitamin B2 (mg/100g)	0.407	0.363	0.440	0.428
Folic Acid/Vitamin B9 (mg/100g)	0.389	0.330	0.429	0.419
Phytonadione/Vitamin K1 (mcg/g)	0.432	0.344	0.344	0.322
Total Tocopherols (mg/100g)				
Alpha Tocopherol	1.79	1.82	1.35	1.63
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	26.1	21.6	21.8	23.5
Delta Tocopherol	10.3	10.2	9.65	9.30

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	7	7	7	7
Sample Description	L04/E07/R1	L04/E07/R2	L04/E07/R3	L04/E07/R4
Covance LIMS #	10200378	10200357	10200071	10200276
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	0.628	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	37.8	40.5	44.8	45.1
Threonine	14.0	14.7	15.9	16.1
Serine	16.7	17.8	20.4	20.3
Glutamic Acid	55.2	59.6	67.9	68.3
Proline	17.1	17.8	20.3	19.8
Glycine	14.8	15.8	17.1	16.7
Alanine	15.4	16.0	17.4	17.5
Cystine	5.98	6.44	6.28	6.09
Valine	16.7	17.3	18.5	18.4
Methionine	5.17	5.00	5.42	5.52
Isoleucine	16.3	17.6	18.5	18.5
Leucine	25.5	26.9	29.6	30.1
Tyrosine	13.4	14.1	15.2	15.2
Phenylalanine	16.8	17.8	19.9	20.1
Lysine	21.0	22.3	24.9	24.8
Histidine	8.78	9.38	10.3	10.3
Arginine	23.7	25.5	28.9	28.3
Tryptophan	5.18	5.51	5.79	5.40

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	7	7	7	7
Sample Description	L04/E07/R1	L04/E07/R2	L04/E07/R3	L04/E07/R4
Covance LIMS #	10200378	10200357	10200071	10200276
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.18	2.09	2.07	2.15
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	0.0221
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.920	0.924	0.920	0.954
18:1 Oleic	4.76	4.79	5.08	5.03
18:2 Linoleic	11.1	10.6	10.3	10.9
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.71	1.61	1.55	1.62
20:0 Arachidic	0.0749	0.0709	0.0709	0.0738
20:1 Eicosenoic	0.0448	0.0361	0.0348	0.0366
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0788	0.0731	0.0721	0.0750

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	7	7	7	7
Sample Description	L07/E07/R1	L07/E07/R2	L07/E07/R3	L07/E07/R4
Covance LIMS #	10200229	10200156	10200096	10200122
Proximate (%)				
Moisture	9.67	7.79	8.17	8.30
Protein	37.5	34.8	36.9	36.8
Total Fat	21.0	22.8	20.9	21.2
Ash	5.97	6.02	6.00	6.00
Carbohydrates	35.4	36.4	36.2	36.1
Acid Detergent Fiber (%)	17.6	13.4	16.6	14.0
Neutral Detergent Fiber (%)	18.9	15.2	16.7	17.4
Lectin (H.U./mg sample)*	27.5	17.7	31.8	53.7
Lectin (H.U./mg protein)*	81.0	55.1	93.8	159
Trypsin Inhibitor (TIU/mg)**	25.9	31.6	30.5	36.1
Phytic Acid (%)	1.75	2.13	1.79	1.79
Raffinose (%)	0.940	0.928	0.938	0.912
Stachyose (%)	3.70	3.69	3.83	3.62
Minerals (ppm)				
Calcium	2820	3240	3010	3030
Iron	88.6	100	88.4	93.0
Magnesium	2770	2910	2730	2910
Phosphorus	7640	8440	7740	7960
Potassium	19700	20500	19600	20300
Isoflavones (mcg/g)				
Daidzein	237	192	250	234
Glycitein	188	153	234	194
Genistein	220	185	192	212
Vitamins				
Beta Carotene (mg/100g)	0.0807	0.0778	0.0910	0.0768
Thiamine HCl/Vitamin B1 (mg/100g)	0.582	0.762	0.598	0.624
Riboflavin/Vitamin B2 (mg/100g)	0.513	0.396	0.445	0.454
Folic Acid/Vitamin B9 (mg/100g)	0.366	0.465	0.517	0.460
Phytonadione/Vitamin K1 (mcg/g)	0.480	0.626	0.617	0.287
Total Tocopherols (mg/100g)				
Alpha Tocopherol	5.39	4.90	5.52	5.05
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	22.3	24.2	22.5	21.7
Delta Tocopherol	4.49	5.03	4.16	4.48

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	7	7	7	7
Sample Description	L07/E07/R1	L07/E07/R2	L07/E07/R3	L07/E07/R4
Covance LIMS #	10200229	10200156	10200096	10200122
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	41.4	39.6	42.0	41.3
Threonine	15.2	14.6	15.4	14.9
Serine	18.5	18.3	18.6	18.1
Glutamic Acid	61.2	59.2	62.2	61.5
Proline	19.0	17.2	18.5	18.1
Glycine	16.5	15.5	16.3	16.1
Alanine	16.9	16.2	16.6	16.4
Cystine	6.19	6.54	6.28	5.91
Valine	18.2	17.2	18.2	18.3
Methionine	5.25	5.06	4.78	5.34
Isoleucine	18.0	16.5	17.9	17.7
Leucine	28.1	26.5	28.1	27.5
Tyrosine	14.4	13.8	14.7	14.2
Phenylalanine	18.6	17.6	19.1	18.3
Lysine	24.8	22.2	24.6	22.4
Histidine	10.5	9.64	10.2	10.1
Arginine	27.3	25.1	27.0	26.2
Tryptophan	5.79	5.50	5.52	5.73

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	7	7	7	7
Sample Description	L07/E07/R1	L07/E07/R2	L07/E07/R3	L07/E07/R4
Covance LIMS #	10200229	10200156	10200096	10200122
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.24	2.38	2.15	2.21
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	1.04	1.13	0.994	0.995
18:1 Oleic	5.34	6.16	4.93	5.31
18:2 Linoleic	9.92	10.6	9.59	10.0
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.30	1.44	1.30	1.35
20:0 Arachidic	0.0888	0.0953	0.0860	0.0860
20:1 Eicosenoic	0.0439	0.0470	0.0371	0.0415
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0857	0.0930	0.0816	0.0830

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	7	7	7	7
Sample Description	L08/E07/R1	L08/E07/R2	L08/E07/R3	L08/E07/R4
Covance LIMS #	10200054	10200340	10200090	10200254
Proximate (%)				
Moisture	11.2	11.4	12.0	12.1
Protein	39.0	39.4	39.2	38.2
Total Fat	20.7	19.9	20.1	20.6
Ash	5.07	5.00	5.14	5.29
Carbohydrates	35.2	35.8	35.6	35.9
Acid Detergent Fiber (%)	11.6	12.8	13.2	13.8
Neutral Detergent Fiber (%)	11.2	15.2	15.1	18.4
Lectin (H.U./mg sample)*	19.4	24.2	22.4	20.6
Lectin (H.U./mg protein)*	56.0	69.2	64.9	61.3
Trypsin Inhibitor (TIU/mg)**	34.0	34.1	54.9	27.9
Phytic Acid (%)	1.32	1.29	1.30	1.32
Raffinose (%)	0.884	0.841	0.868	0.829
Stachyose (%)	3.72	3.71	3.78	3.71
Minerals (ppm)				
Calcium	2420	2450	2360	2370
Iron	89.8	89.5	85.0	81.9
Magnesium	2330	2280	2410	2300
Phosphorus	6080	5720	6580	6020
Potassium	18000	17700	18300	18100
Isoflavones (mcg/g)				
Daidzein	476	524	563	590
Glycitein	185	185	176	176
Genistein	654	807	772	922
Vitamins				
Beta Carotene (mg/100g)	0.0270	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.449	0.380	0.361	0.324
Riboflavin/Vitamin B2 (mg/100g)	0.411	0.429	0.336	0.451
Folic Acid/Vitamin B9 (mg/100g)	0.255	0.255	0.265	0.249
Phytonadione/Vitamin K1 (mcg/g)	0.222	0.220	0.340	0.222
Total Tocopherols (mg/100g)				
Alpha Tocopherol	2.40	2.39	2.19	2.14
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	19.8	21.6	20.3	18.2
Delta Tocopherol	6.71	7.14	7.02	6.45

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	7	7	7	7
Sample Description	L08/E07/R1	L08/E07/R2	L08/E07/R3	L08/E07/R4
Covance LIMS #	10200054	10200340	10200090	10200254
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	42.7	44.8	45.9	43.6
Threonine	15.5	16.0	16.1	15.8
Serine	17.8	19.4	19.9	19.5
Glutamic Acid	64.1	69.0	70.9	67.3
Proline	20.6	20.2	20.2	19.7
Glycine	16.8	17.9	17.3	16.8
Alanine	17.7	17.6	17.5	17.5
Cystine	5.60	5.20	5.77	5.35
Valine	19.3	20.3	20.1	19.0
Methionine	5.39	5.34	5.02	5.57
Isoleucine	18.8	19.2	19.4	18.7
Leucine	30.0	30.2	30.7	29.6
Tyrosine	15.4	15.5	15.7	15.1
Phenylalanine	20.3	20.8	20.9	19.9
Lysine	25.5	24.4	25.5	24.6
Histidine	10.6	10.6	10.8	10.4
Arginine	29.4	29.5	29.5	28.8
Tryptophan	6.00	5.81	6.13	5.68

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	7	7	7	7
Sample Description	L08/E07/R1	L08/E07/R2	L08/E07/R3	L08/E07/R4
Covance LIMS #	10200054	10200340	10200090	10200254
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.09	2.03	1.92	2.10
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	0.0227	< LOQ	< LOQ	0.0233
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	1.06	1.01	0.952	1.01
18:1 Oleic	4.40	4.21	4.00	4.29
18:2 Linoleic	10.4	10.0	9.47	10.4
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.54	1.49	1.38	1.49
20:0 Arachidic	0.0830	0.0782	0.0733	0.0777
20:1 Eicosenoic	0.0338	0.0335	0.0270	0.0341
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0788	0.0725	0.0692	0.0724

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	7	7	7	7
Sample Description	L09/E07/R1	L09/E07/R2	L09/E07/R3	L09/E07/R4
Covance LIMS #	10200253	10200046	10200114	10200242
Proximate (%)				
Moisture	9.93	9.01	9.28	9.23
Protein	41.0	39.6	38.8	40.4
Total Fat	20.4	20.3	20.8	20.7
Ash	5.26	5.24	5.18	5.18
Carbohydrates	33.3	34.8	35.2	33.7
Acid Detergent Fiber (%)	13.8	14.4	15.3	14.3
Neutral Detergent Fiber (%)	17.9	14.6	16.0	17.4
Lectin (H.U./mg sample)*	18.5	27.5	47.3	49.8
Lectin (H.U./mg protein)*	50.3	76.3	134	136
Trypsin Inhibitor (TIU/mg)**	28.1	29.6	35.4	30.4
Phytic Acid (%)	1.44	1.45	1.44	1.44
Raffinose (%)	0.793	0.795	0.826	0.806
Stachyose (%)	3.79	3.81	3.88	3.94
Minerals (ppm)				
Calcium	3300	3320	3350	3340
Iron	78.6	81.8	76.7	77.1
Magnesium	2560	2640	2570	2480
Phosphorus	6360	6150	6190	6100
Potassium	16900	17300	17500	17000
Isoflavones (mcg/g)				
Daidzein	339	410	376	360
Glycitein	151	151	196	140
Genistein	600	578	541	524
Vitamins				
Beta Carotene (mg/100g)	0.0291	0.0298	0.0338	0.0315
Thiamine HCl/Vitamin B1 (mg/100g)	0.414	0.574	0.529	0.502
Riboflavin/Vitamin B2 (mg/100g)	0.417	0.300	0.317	0.332
Folic Acid/Vitamin B9 (mg/100g)	0.421	0.473	0.495	0.565
Phytonadione/Vitamin K1 (mcg/g)	0.308	0.466	0.457	0.321
Total Tocopherols (mg/100g)				
Alpha Tocopherol	1.75	1.82	2.11	1.60
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	19.5	21.7	23.4	16.3
Delta Tocopherol	7.26	7.86	7.66	5.34

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	7	7	7	7
Sample Description	L09/E07/R1	L09/E07/R2	L09/E07/R3	L09/E07/R4
Covance LIMS #	10200253	10200046	10200114	10200242
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	46.2	44.9	45.6	44.2
Threonine	16.0	16.2	15.9	15.6
Serine	20.3	20.2	19.8	18.6
Glutamic Acid	71.3	68.4	68.8	65.0
Proline	20.9	20.3	19.8	19.1
Glycine	17.3	17.1	17.0	16.7
Alanine	17.7	17.5	17.4	17.1
Cystine	5.62	5.47	6.18	5.18
Valine	19.8	18.8	19.6	19.6
Methionine	5.70	5.19	5.41	5.57
Isoleucine	19.5	18.4	19.4	19.2
Leucine	31.1	30.2	30.9	29.4
Tyrosine	15.7	15.5	15.5	15.2
Phenylalanine	21.0	20.6	20.6	19.6
Lysine	25.3	25.6	24.5	24.5
Histidine	10.8	10.7	10.4	10.4
Arginine	30.1	29.6	29.3	28.1
Tryptophan	5.86	6.08	6.00	5.66

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	7	7	7	7
Sample Description	L09/E07/R1	L09/E07/R2	L09/E07/R3	L09/E07/R4
Covance LIMS #	10200253	10200046	10200114	10200242
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.08	2.10	2.15	2.14
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.850	0.850	0.886	0.871
18:1 Oleic	4.85	4.70	4.74	4.61
18:2 Linoleic	10.1	10.1	10.5	10.9
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.39	1.33	1.44	1.49
20:0 Arachidic	0.0666	0.0661	0.0688	0.0686
20:1 Eicosenoic	0.0365	0.0358	0.0367	0.0360
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0701	0.0686	0.0716	0.0705

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	7	7	7	7
Sample Description	L10/E07/R1	L10/E07/R2	L10/E07/R3	L10/E07/R4
Covance LIMS #	10200217	10200038	10200238	10200092
Proximate (%)				
Moisture	8.24	8.22	8.32	8.34
Protein	39.1	38.7	32.9	37.4
Total Fat	20.2	20.6	21.3	20.6
Ash	4.27	4.29	4.37	4.45
Carbohydrates	36.4	36.4	41.4	37.5
Acid Detergent Fiber (%)	19.4	14.9	15.4	16.4
Neutral Detergent Fiber (%)	18.3	17.0	18.7	18.3
Lectin (H.U./mg sample)*	36.5	24.1	38.4	44.4
Lectin (H.U./mg protein)*	102	67.9	128	130
Trypsin Inhibitor (TIU/mg)**	22.3	29.0	31.7	34.8
Phytic Acid (%)	0.861	0.816	0.908	0.813
Raffinose (%)	0.767	0.674	0.777	0.753
Stachyose (%)	3.92	3.91	3.98	3.93
Minerals (ppm)				
Calcium	2770	2970	2970	3070
Iron	89.1	75.2	66.0	64.3
Magnesium	2020	2170	2080	2170
Phosphorus	4360	4500	4560	4530
Potassium	13500	14900	14500	15600
Isoflavones (mcg/g)				
Daidzein	428	430	436	400
Glycitein	226	224	256	233
Genistein	494	547	521	496
Vitamins				
Beta Carotene (mg/100g)	0.0352	0.0270	0.0318	0.0403
Thiamine HCl/Vitamin B1 (mg/100g)	0.677	0.678	0.588	0.557
Riboflavin/Vitamin B2 (mg/100g)	0.362	0.351	0.458	0.387
Folic Acid/Vitamin B9 (mg/100g)	0.437	0.403	0.435	0.501
Phytonadione/Vitamin K1 (mcg/g)	0.301	0.459	0.371	0.547
Total Tocopherols (mg/100g)				
Alpha Tocopherol	1.65	1.49	1.80	1.85
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	23.1	22.3	22.8	23.6
Delta Tocopherol	8.47	8.74	8.53	8.46

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	7	7	7	7
Sample Description	L10/E07/R1	L10/E07/R2	L10/E07/R3	L10/E07/R4
Covance LIMS #	10200217	10200038	10200238	10200092
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	43.6	44.7	44.6	43.7
Threonine	15.9	16.2	15.9	15.4
Serine	19.6	20.0	19.5	18.4
Glutamic Acid	64.8	67.8	66.5	65.8
Proline	18.9	20.0	19.6	19.5
Glycine	17.0	17.0	17.0	16.7
Alanine	17.7	17.5	17.3	17.2
Cystine	5.84	5.36	5.32	5.71
Valine	18.7	19.0	19.1	19.3
Methionine	4.73	4.83	5.74	5.33
Isoleucine	18.6	18.6	18.7	19.0
Leucine	29.4	30.0	29.8	29.5
Tyrosine	15.3	15.7	15.3	15.1
Phenylalanine	19.7	20.5	20.1	20.2
Lysine	26.3	25.3	25.3	25.6
Histidine	10.9	10.7	10.1	10.6
Arginine	29.8	29.7	28.7	28.5
Tryptophan	5.98	5.83	5.44	6.05

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	7	7	7	7
Sample Description	L10/E07/R1	L10/E07/R2	L10/E07/R3	L10/E07/R4
Covance LIMS #	10200217	10200038	10200238	10200092
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.93	1.88	2.06	1.89
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.932	0.875	0.932	0.842
18:1 Oleic	4.78	4.48	4.88	4.24
18:2 Linoleic	10.1	9.74	11.0	9.82
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.35	1.34	1.46	1.33
20:0 Arachidic	0.0709	0.0681	0.0719	0.0650
20:1 Eicosenoic	0.0348	0.0329	0.0384	0.0303
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0683	0.0664	0.0738	0.0669

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	8	8	8	8
Sample Description	L01/E08/R1	L01/E08/R2	L01/E08/R3	L01/E08/R4
Covance LIMS #	10200361	10200367	10200228	10200385
Proximate (%)				
Moisture	8.21	8.22	8.50	8.25
Protein	38.9	39.1	40.0	39.8
Total Fat	19.7	19.0	18.4	17.9
Ash	4.94	4.97	5.38	4.97
Carbohydrates	36.5	36.9	36.3	37.4
Acid Detergent Fiber (%)	12.3	11.9	14.2	14.1
Neutral Detergent Fiber (%)	15.7	15.5	15.4	14.7
Lectin (H.U./mg sample)*	13.0	13.8	18.9	7.34
Lectin (H.U./mg protein)*	36.3	38.6	51.7	20.1
Trypsin Inhibitor (TIU/mg)**	42.2	29.3	30.7	29.5
Phytic Acid (%)	1.27	1.36	1.37	1.33
Raffinose (%)	0.790	0.849	0.808	0.827
Stachyose (%)	4.13	4.13	4.39	4.24
Minerals (ppm)				
Calcium	2340	2300	2310	2250
Iron	63.4	69.3	66.3	64.0
Magnesium	2110	2040	2080	2030
Phosphorus	5880	5600	6040	5620
Potassium	18700	18300	19500	18300
Isoflavones (mcg/g)				
Daidzein	959	1050	1010	1020
Glycitein	64.9	100	90.4	71.1
Genistein	992	1010	929	1020
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.341	0.402	0.318	0.312
Riboflavin/Vitamin B2 (mg/100g)	0.351	0.372	0.404	0.355
Folic Acid/Vitamin B9 (mg/100g)	0.395	0.451	0.379	0.451
Phytonadione/Vitamin K1 (mcg/g)	0.228	0.253	0.293	0.280
Total Tocopherols (mg/100g)				
Alpha Tocopherol	1.57	1.50	1.37	1.55
Beta Tocopherol	0.584	0.592	< LOQ	0.577
Gamma Tocopherol	16.9	16.2	13.1	16.0
Delta Tocopherol	11.2	11.2	10.9	11.1

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	8	8	8	8
Sample Description	L01/E08/R1	L01/E08/R2	L01/E08/R3	L01/E08/R4
Covance LIMS #	10200361	10200367	10200228	10200385
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	45.3	45.2	43.7	45.3
Threonine	15.7	15.7	15.4	15.8
Serine	19.4	19.4	18.8	19.4
Glutamic Acid	71.0	69.8	67.1	71.2
Proline	20.4	21.1	20.2	19.5
Glycine	17.0	16.2	16.5	16.8
Alanine	17.1	17.2	17.3	17.2
Cystine	7.07	5.88	6.04	6.04
Valine	19.2	19.1	18.4	19.4
Methionine	5.20	5.39	5.62	5.41
Isoleucine	19.2	18.6	18.7	19.0
Leucine	29.4	29.4	29.3	29.8
Tyrosine	15.0	15.1	14.9	15.1
Phenylalanine	20.2	20.2	19.7	20.2
Lysine	24.8	25.0	26.1	22.2
Histidine	10.0	10.1	10.3	10.0
Arginine	29.7	29.5	29.8	29.3
Tryptophan	5.84	5.59	5.90	5.71

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	8	8	8	8
Sample Description	L01/E08/R1	L01/E08/R2	L01/E08/R3	L01/E08/R4
Covance LIMS #	10200361	10200367	10200228	10200385
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.05	1.99	1.92	1.87
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.767	0.740	0.723	0.696
18:1 Oleic	4.29	3.93	3.97	3.69
18:2 Linoleic	10.1	9.90	9.40	9.34
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.53	1.49	1.45	1.38
20:0 Arachidic	0.0596	0.0586	0.0568	0.0569
20:1 Eicosenoic	0.0314	0.0296	0.0299	0.0300
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0617	0.0596	0.0596	0.0606

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	8	8	8	8
Sample Description	L02/E08/R1	L02/E08/R2	L02/E08/R3	L02/E08/R4
Covance LIMS #	10200193	10200329	10200104	10200052
Proximate (%)				
Moisture	6.91	7.04	6.52	6.10
Protein	39.5	38.8	38.6	38.0
Total Fat	20.0	20.8	20.0	19.7
Ash	5.29	5.17	4.95	5.17
Carbohydrates	35.2	35.3	36.5	37.2
Acid Detergent Fiber (%)	12.7	15.2	14.8	14.2
Neutral Detergent Fiber (%)	14.3	15.3	15.7	13.5
Lectin (H.U./mg sample)*	27.4	16.9	25.8	16.4
Lectin (H.U./mg protein)*	74.4	46.8	71.5	45.9
Trypsin Inhibitor (TIU/mg)**	61.8	41.5	30.9	31.5
Phytic Acid (%)	1.16	1.22	1.14	0.935
Raffinose (%)	0.736	0.724	0.700	0.707
Stachyose (%)	4.11	4.34	4.17	4.20
Minerals (ppm)				
Calcium	2340	2240	2270	2190
Iron	72.7	73.4	71.5	75.8
Magnesium	2030	2050	2110	2070
Phosphorus	5290	5410	5460	5060
Potassium	18700	18700	19100	18400
Isoflavones (mcg/g)				
Daidzein	1020	958	1070	1060
Glycitein	111	101	110	98.1
Genistein	810	821	850	870
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.480	0.436	0.458	0.440
Riboflavin/Vitamin B2 (mg/100g)	0.293	0.310	0.316	0.368
Folic Acid/Vitamin B9 (mg/100g)	0.462	0.470	0.476	0.446
Phytonadione/Vitamin K1 (mcg/g)	0.321	0.404	0.380	0.248
Total Tocopherols (mg/100g)				
Alpha Tocopherol	1.91	1.84	2.10	1.83
Beta Tocopherol	< LOQ	< LOQ	0.574	< LOQ
Gamma Tocopherol	15.4	14.8	16.2	14.6
Delta Tocopherol	8.36	8.52	9.04	9.09

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	8	8	8	8
Sample Description	L02/E08/R1	L02/E08/R2	L02/E08/R3	L02/E08/R4
Covance LIMS #	10200193	10200329	10200104	10200052
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	43.6	44.2	43.4	43.2
Threonine	15.4	15.7	15.1	15.4
Serine	19.7	19.4	18.2	18.4
Glutamic Acid	68.0	69.1	66.0	65.2
Proline	19.0	20.1	18.8	20.2
Glycine	16.4	16.7	16.4	16.1
Alanine	17.0	17.1	16.7	16.9
Cystine	5.71	5.87	6.09	5.81
Valine	18.0	18.8	18.4	18.3
Methionine	4.84	5.62	5.24	5.65
Isoleucine	17.8	18.6	18.3	18.2
Leucine	28.6	28.9	28.9	29.0
Tyrosine	14.5	14.8	14.8	14.9
Phenylalanine	19.4	19.1	19.3	19.7
Lysine	25.9	24.3	24.4	25.0
Histidine	10.1	9.95	9.66	9.66
Arginine	29.2	29.4	28.8	29.5
Tryptophan	5.54	6.03	6.02	5.90

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	8	8	8	8
Sample Description	L02/E08/R1	L02/E08/R2	L02/E08/R3	L02/E08/R4
Covance LIMS #	10200193	10200329	10200104	10200052
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.88	2.08	2.08	2.04
16:1 Palmitoleic	< LOQ	0.0230	0.0220	0.0228
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.842	0.978	0.920	0.917
18:1 Oleic	4.21	4.87	4.58	4.71
18:2 Linoleic	8.96	9.70	9.66	9.58
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.24	1.38	1.36	1.34
20:0 Arachidic	0.0641	0.0748	0.0706	0.0702
20:1 Eicosenoic	0.0295	0.0341	0.0327	0.0329
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0631	0.0688	0.0666	0.0668

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	8	8	8	8
Sample Description	L03/E08/R1	L03/E08/R2	L03/E08/R3	L03/E08/R4
Covance LIMS #	10200232	10200088	10200384	10200180
Proximate (%)				
Moisture	8.54	8.32	8.56	8.18
Protein	40.5	40.0	40.5	42.3
Total Fat	22.1	21.3	21.7	20.8
Ash	5.29	5.14	5.18	5.25
Carbohydrates	32.1	33.6	32.7	31.7
Acid Detergent Fiber (%)	15.0	16.5	12.8	13.7
Neutral Detergent Fiber (%)	16.5	16.3	13.5	13.5
Lectin (H.U./mg sample)*	37.1	38.9	9.84	38.2
Lectin (H.U./mg protein)*	100	106	26.6	98.6
Trypsin Inhibitor (TIU/mg)**	57.4	68.3	57.5	61.8
Phytic Acid (%)	1.37	1.27	1.49	1.26
Raffinose (%)	1.45	1.27	1.27	1.05
Stachyose (%)	3.55	4.11	3.75	4.03
Minerals (ppm)				
Calcium	2930	3280	2930	3150
Iron	78.9	72.5	86.5	67.2
Magnesium	2250	2330	2220	2160
Phosphorus	6110	5900	6050	5430
Potassium	18200	17700	17900	17600
Isoflavones (mcg/g)				
Daidzein	448	529	352	610
Glycitein	88.6	69.3	76.7	79.1
Genistein	358	529	343	514
Vitamins				
Beta Carotene (mg/100g)	0.0541	< LOQ	0.0478	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.488	0.579	0.411	0.465
Riboflavin/Vitamin B2 (mg/100g)	0.398	0.469	0.422	0.310
Folic Acid/Vitamin B9 (mg/100g)	0.465	0.542	0.592	0.416
Phytonadione/Vitamin K1 (mcg/g)	0.502	0.630	0.548	0.514
Total Tocopherols (mg/100g)				
Alpha Tocopherol	4.57	3.42	5.17	3.79
Beta Tocopherol	0.620	< LOQ	0.634	0.612
Gamma Tocopherol	15.5	16.4	18.5	17.2
Delta Tocopherol	6.40	6.80	6.58	6.53

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	8	8	8	8
Sample Description	L03/E08/R1	L03/E08/R2	L03/E08/R3	L03/E08/R4
Covance LIMS #	10200232	10200088	10200384	10200180
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	46.6	47.3	45.5	49.6
Threonine	15.5	15.9	15.9	16.7
Serine	19.9	20.6	20.1	21.6
Glutamic Acid	72.4	73.8	71.6	78.3
Proline	20.1	20.9	20.9	21.9
Glycine	16.9	17.2	16.6	17.8
Alanine	17.6	17.7	17.0	18.3
Cystine	6.51	6.71	7.36	6.84
Valine	19.7	19.2	18.8	20.6
Methionine	5.95	5.42	6.04	5.84
Isoleucine	19.5	19.4	19.0	20.7
Leucine	30.0	30.5	29.7	32.2
Tyrosine	15.0	15.6	15.0	16.4
Phenylalanine	20.4	21.1	20.2	21.7
Lysine	25.1	26.9	24.5	27.2
Histidine	9.85	10.6	10.1	10.9
Arginine	30.1	30.9	29.6	32.6
Tryptophan	5.83	6.06	5.81	5.86

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	8	8	8	8
Sample Description	L03/E08/R1	L03/E08/R2	L03/E08/R3	L03/E08/R4
Covance LIMS #	10200232	10200088	10200384	10200180
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.20	2.13	2.24	2.10
16:1 Palmitoleic	0.0223	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.912	0.791	0.932	0.785
18:1 Oleic	5.98	4.76	5.56	4.65
18:2 Linoleic	10.2	9.64	10.3	9.90
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.09	1.07	1.20	1.12
20:0 Arachidic	0.0776	0.0641	0.0821	0.0629
20:1 Eicosenoic	0.0473	0.0373	0.0534	0.0392
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0786	0.0671	0.0808	0.0705

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	8	8	8	8
Sample Description	L04/E08/R1	L04/E08/R2	L04/E08/R3	L04/E08/R4
Covance LIMS #	10200335	10200106	10200047	10200249
Proximate (%)				
Moisture	12.1	9.50	9.22	11.3
Protein	38.3	37.7	37.9	36.4
Total Fat	20.0	20.4	20.5	21.5
Ash	5.36	5.05	5.10	5.14
Carbohydrates	36.3	36.8	36.6	36.9
Acid Detergent Fiber (%)	15.6	16.8	10.8	8.20
Neutral Detergent Fiber (%)	16.7	17.1	15.5	21.9
Lectin (H.U./mg sample)*	9.29	27.4	15.5	13.4
Lectin (H.U./mg protein)*	27.5	80.3	45.2	41.5
Trypsin Inhibitor (TIU/mg)**	44.5	42.3	39.4	50.3
Phytic Acid (%)	1.37	1.40	1.39	1.34
Raffinose (%)	0.859	0.743	0.694	0.824
Stachyose (%)	4.05	4.43	4.34	4.52
Minerals (ppm)				
Calcium	2720	2650	2380	2570
Iron	75.7	71.9	71.8	73.6
Magnesium	2150	2230	2150	2120
Phosphorus	5920	6120	5850	6010
Potassium	18300	18500	17700	17800
Isoflavones (mcg/g)				
Daidzein	866	913	942	1140
Glycitein	82.3	127	132	99.8
Genistein	840	756	802	932
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.398	0.394	0.431	0.470
Riboflavin/Vitamin B2 (mg/100g)	0.399	0.305	0.316	0.437
Folic Acid/Vitamin B9 (mg/100g)	0.435	0.476	0.333	0.414
Phytonadione/Vitamin K1 (mcg/g)	0.396	0.482	0.458	0.338
Total Tocopherols (mg/100g)				
Alpha Tocopherol	2.12	2.04	1.50	1.58
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	18.3	18.0	15.0	14.9
Delta Tocopherol	10.3	10.4	10.1	9.37

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	8	8	8	8
Sample Description	L04/E08/R1	L04/E08/R2	L04/E08/R3	L04/E08/R4
Covance LIMS #	10200335	10200106	10200047	10200249
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	45.2	43.2	44.0	41.1
Threonine	15.8	15.0	15.4	14.5
Serine	19.7	19.0	19.6	18.9
Glutamic Acid	70.4	66.3	67.4	64.6
Proline	20.1	19.0	19.5	18.5
Glycine	17.0	16.1	16.3	15.3
Alanine	17.5	16.6	16.7	15.8
Cystine	6.19	6.51	6.29	6.45
Valine	19.2	18.0	17.7	17.1
Methionine	5.46	5.10	5.47	5.39
Isoleucine	19.0	18.0	17.7	16.8
Leucine	29.5	28.1	28.8	26.9
Tyrosine	15.1	14.4	14.9	14.0
Phenylalanine	19.9	18.9	19.7	18.0
Lysine	25.0	24.2	25.6	23.4
Histidine	10.2	9.38	10.0	9.43
Arginine	29.9	27.8	29.1	26.5
Tryptophan	5.61	5.81	5.90	5.42

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	8	8	8	8
Sample Description	L04/E08/R1	L04/E08/R2	L04/E08/R3	L04/E08/R4
Covance LIMS #	10200335	10200106	10200047	10200249
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.98	2.06	2.07	2.18
16:1 Palmitoleic	< LOQ	0.0224	0.0246	0.0241
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.852	0.894	0.880	0.923
18:1 Oleic	4.84	5.13	5.28	5.20
18:2 Linoleic	9.64	9.92	9.76	10.5
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.29	1.33	1.33	1.42
20:0 Arachidic	0.0659	0.0696	0.0686	0.0719
20:1 Eicosenoic	0.0353	0.0373	0.0367	0.0392
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0664	0.0692	0.0685	0.0714

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	8	8	8	8
Sample Description	L07/E08/R1	L07/E08/R2	L07/E08/R3	L07/E08/R4
Covance LIMS #	10200141	10200060	10200112	10200388
Proximate (%)				
Moisture	8.52	9.07	9.29	9.14
Protein	32.1	36.4	32.6	34.4
Total Fat	23.4	22.2	23.2	22.9
Ash	6.59	5.89	6.36	5.79
Carbohydrates	37.9	35.5	37.8	36.9
Acid Detergent Fiber (%)	15.5	13.5	20.0	10.4
Neutral Detergent Fiber (%)	17.9	15.8	21.5	14.5
Lectin (H.U./mg sample)*	18.6	15.1	28.9	8.74
Lectin (H.U./mg protein)*	63.2	45.5	97.6	28.0
Trypsin Inhibitor (TIU/mg)**	67.9	37.6	50.7	51.1
Phytic Acid (%)	2.02	1.53	1.97	1.89
Raffinose (%)	0.927	0.971	1.00	0.964
Stachyose (%)	4.03	4.19	4.07	4.13
Minerals (ppm)				
Calcium	3000	2530	3230	2990
Iron	89.4	82.5	92.5	95.4
Magnesium	2660	2580	2760	2550
Phosphorus	8090	6990	8350	7300
Potassium	21400	20200	24700	20700
Isoflavones (mcg/g)				
Daidzein	379	379	515	401
Glycitein	65.0	73.0	96.9	85.3
Genistein	324	277	368	391
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	0.0271	0.0238
Thiamine HCl/Vitamin B1 (mg/100g)	0.773	0.550	0.771	0.586
Riboflavin/Vitamin B2 (mg/100g)	0.415	0.425	0.375	0.364
Folic Acid/Vitamin B9 (mg/100g)	0.392	0.379	0.384	0.416
Phytonadione/Vitamin K1 (mcg/g)	0.374	0.301	0.543	0.479
Total Tocopherols (mg/100g)				
Alpha Tocopherol	6.86	7.08	7.71	7.05
Beta Tocopherol	0.674	0.684	0.779	0.779
Gamma Tocopherol	16.2	15.9	18.1	17.8
Delta Tocopherol	4.63	4.96	5.08	5.59

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	8	8	8	8
Sample Description	L07/E08/R1	L07/E08/R2	L07/E08/R3	L07/E08/R4
Covance LIMS #	10200141	10200060	10200112	10200388
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	36.5	41.5	36.0	39.2
Threonine	13.2	14.6	13.1	14.4
Serine	16.0	18.5	15.9	17.1
Glutamic Acid	53.6	63.7	52.7	59.4
Proline	16.2	19.2	16.1	17.3
Glycine	13.9	15.8	14.2	14.7
Alanine	15.0	16.6	14.8	15.6
Cystine	6.48	6.14	6.24	6.48
Valine	16.0	17.8	15.5	17.1
Methionine	4.73	5.11	4.28	4.86
Isoleucine	15.5	17.4	15.3	16.7
Leucine	24.0	27.1	23.8	25.5
Tyrosine	12.8	14.4	12.7	13.5
Phenylalanine	16.1	18.5	15.8	17.2
Lysine	21.0	23.8	21.8	21.1
Histidine	9.11	9.74	8.72	9.06
Arginine	23.1	26.9	22.9	24.7
Tryptophan	5.21	5.76	5.40	5.32

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	8	8	8	8
Sample Description	L07/E08/R1	L07/E08/R2	L07/E08/R3	L07/E08/R4
Covance LIMS #	10200141	10200060	10200112	10200388
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.51	2.38	2.57	2.38
16:1 Palmitoleic	0.0243	0.0241	0.0251	0.0225
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	1.10	1.07	1.15	1.04
18:1 Oleic	6.32	5.83	6.44	5.90
18:2 Linoleic	10.9	10.4	11.1	10.7
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.25	1.15	1.27	1.20
20:0 Arachidic	0.0977	0.0931	0.102	0.0943
20:1 Eicosenoic	0.0548	0.0504	0.0591	0.0608
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0918	0.0901	0.0962	0.0910

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	8	8	8	8
Sample Description	L08/E08/R1	L08/E08/R2	L08/E08/R3	L08/E08/R4
Covance LIMS #	10200244	10200360	10200350	10200131
Proximate (%)				
Moisture	13.6	14.1	14.2	14.2
Protein	44.0	38.2	39.3	38.3
Total Fat	21.2	20.4	20.0	21.0
Ash	5.24	4.77	5.24	5.14
Carbohydrates	29.6	36.7	35.4	35.5
Acid Detergent Fiber (%)	13.7	10.9	11.0	14.5
Neutral Detergent Fiber (%)	16.2	14.2	14.1	14.9
Lectin (H.U./mg sample)*	24.7	11.8	8.85	11.8
Lectin (H.U./mg protein)*	64.9	35.9	26.2	35.8
Trypsin Inhibitor (TIU/mg)**	37.2	36.9	43.0	45.2
Phytic Acid (%)	1.45	1.26	1.40	1.32
Raffinose (%)	0.678	0.607	0.638	0.672
Stachyose (%)	4.36	3.95	4.07	4.07
Minerals (ppm)				
Calcium	2050	2100	2170	2120
Iron	82.5	88.7	84.4	83.1
Magnesium	2220	2210	2320	2390
Phosphorus	5980	5450	6220	5870
Potassium	18600	17800	18600	18800
Isoflavones (mcg/g)				
Daidzein	1090	994	838	1070
Glycitein	141	89.5	74.1	120
Genistein	815	922	780	857
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.612	0.425	0.411	0.408
Riboflavin/Vitamin B2 (mg/100g)	0.435	0.322	0.312	0.442
Folic Acid/Vitamin B9 (mg/100g)	0.274	0.306	0.305	0.307
Phytonadione/Vitamin K1 (mcg/g)	0.241	0.224	0.211	0.367
Total Tocopherols (mg/100g)				
Alpha Tocopherol	3.02	2.55	2.66	2.37
Beta Tocopherol	< LOQ	0.692	0.615	0.643
Gamma Tocopherol	15.6	16.1	14.9	14.0
Delta Tocopherol	8.13	9.03	8.21	8.14

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	8	8	8	8
Sample Description	L08/E08/R1	L08/E08/R2	L08/E08/R3	L08/E08/R4
Covance LIMS #	10200244	10200360	10200350	10200131
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	42.4	42.7	44.2	45.1
Threonine	15.2	14.9	15.4	15.6
Serine	18.9	18.3	18.8	19.7
Glutamic Acid	67.4	67.6	69.7	70.4
Proline	19.2	19.6	19.8	19.6
Glycine	16.0	16.5	17.0	16.9
Alanine	16.8	16.9	17.1	17.2
Cystine	6.05	6.44	5.58	5.92
Valine	18.2	18.3	19.5	19.0
Methionine	5.68	4.96	5.54	5.52
Isoleucine	17.8	18.2	18.9	18.9
Leucine	28.1	27.7	28.9	29.1
Tyrosine	14.4	14.1	14.7	15.3
Phenylalanine	19.0	19.1	19.8	19.7
Lysine	24.2	23.1	24.6	22.5
Histidine	9.27	9.57	10.0	9.91
Arginine	27.7	27.8	29.6	29.5
Tryptophan	5.57	5.87	6.14	5.93

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	8	8	8	8
Sample Description	L08/E08/R1	L08/E08/R2	L08/E08/R3	L08/E08/R4
Covance LIMS #	10200244	10200360	10200350	10200131
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.15	2.06	1.88	2.06
16:1 Palmitoleic	< LOQ	0.0236	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	1.08	1.05	1.01	1.08
18:1 Oleic	4.90	4.66	4.43	4.81
18:2 Linoleic	10.4	10.1	9.15	10.0
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.38	1.34	1.21	1.29
20:0 Arachidic	0.0844	0.0806	0.0776	0.0829
20:1 Eicosenoic	0.0380	0.0339	0.0324	0.0347
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0772	0.0730	0.0732	0.0774

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	8	8	8	8
Sample Description	L09/E08/R1	L09/E08/R2	L09/E08/R3	L09/E08/R4
Covance LIMS #	10200110	10200344	10200372	10200048
Proximate (%)				
Moisture	9.15	9.11	9.20	8.28
Protein	38.3	38.4	38.1	36.2
Total Fat	19.9	21.1	21.3	20.7
Ash	4.92	5.03	4.91	5.00
Carbohydrates	36.9	35.4	35.7	38.1
Acid Detergent Fiber (%)	17.1	15.3	10.7	13.5
Neutral Detergent Fiber (%)	17.6	15.8	14.9	11.2
Lectin (H.U./mg sample)*	28.2	22.3	13.5	19.3
Lectin (H.U./mg protein)*	81.0	64.0	39.1	58.1
Trypsin Inhibitor (TIU/mg)**	30.9	39.2	42.3	47.1
Phytic Acid (%)	1.27	1.21	1.24	1.26
Raffinose (%)	0.718	0.713	0.716	0.668
Stachyose (%)	4.22	4.06	4.17	4.27
Minerals (ppm)				
Calcium	2690	2700	2540	2760
Iron	77.5	79.2	77.2	78.4
Magnesium	2320	2190	2110	2280
Phosphorus	5660	5400	5390	5610
Potassium	18300	17900	17100	17600
Isoflavones (mcg/g)				
Daidzein	766	822	760	720
Glycitein	78.8	110	105	112
Genistein	704	693	703	647
Vitamins				
Beta Carotene (mg/100g)	< LOQ	0.0310	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.385	0.471	0.436	0.346
Riboflavin/Vitamin B2 (mg/100g)	0.284	0.380	0.427	0.285
Folic Acid/Vitamin B9 (mg/100g)	0.458	0.533	0.437	0.423
Phytonadione/Vitamin K1 (mcg/g)	0.440	0.304	0.393	0.526
Total Tocopherols (mg/100g)				
Alpha Tocopherol	2.45	2.53	2.61	2.31
Beta Tocopherol	< LOQ	< LOQ	0.561	< LOQ
Gamma Tocopherol	17.0	17.1	18.3	15.8
Delta Tocopherol	8.32	8.16	8.78	8.11

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	8	8	8	8
Sample Description	L09/E08/R1	L09/E08/R2	L09/E08/R3	L09/E08/R4
Covance LIMS #	10200110	10200344	10200372	10200048
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	43.7	43.2	44.1	43.7
Threonine	15.0	15.1	15.9	15.5
Serine	19.2	17.8	19.1	19.4
Glutamic Acid	67.0	65.0	67.5	66.7
Proline	19.8	20.0	18.7	20.1
Glycine	16.0	16.5	16.2	16.5
Alanine	16.5	16.5	17.1	17.2
Cystine	6.49	5.31	6.23	5.94
Valine	18.1	19.0	18.5	18.0
Methionine	5.44	5.52	5.47	5.26
Isoleucine	18.2	18.6	18.3	17.9
Leucine	28.8	28.7	28.5	29.0
Tyrosine	14.7	14.9	15.0	15.2
Phenylalanine	19.4	19.6	19.5	20.0
Lysine	24.9	24.8	22.0	25.6
Histidine	9.41	9.94	10.1	10.1
Arginine	28.3	28.6	28.9	29.0
Tryptophan	6.06	5.85	6.06	6.01

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	8	8	8	8
Sample Description	L09/E08/R1	L09/E08/R2	L09/E08/R3	L09/E08/R4
Covance LIMS #	10200110	10200344	10200372	10200048
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.15	2.19	2.25	2.24
16:1 Palmitoleic	0.0248	0.0254	0.0257	0.0253
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.857	0.876	0.938	0.899
18:1 Oleic	4.70	4.90	5.12	4.93
18:2 Linoleic	9.70	10.1	10.6	10.4
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.20	1.22	1.29	1.24
20:0 Arachidic	0.0667	0.0687	0.0739	0.0711
20:1 Eicosenoic	0.0367	0.0375	0.0384	0.0397
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0667	0.0687	0.0716	0.0698

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	8	8	8	8
Sample Description	L10/E08/R1	L10/E08/R2	L10/E08/R3	L10/E08/R4
Covance LIMS #	10200120	10200043	10200218	10200281
Proximate (%)				
Moisture	9.63	9.81	9.54	12.6
Protein	39.4	39.3	39.1	38.8
Total Fat	19.0	20.1	19.5	21.2
Ash	4.37	4.17	4.61	4.84
Carbohydrates	37.2	36.5	36.8	35.2
Acid Detergent Fiber (%)	15.7	13.6	15.9	14.1
Neutral Detergent Fiber (%)	17.3	15.0	17.5	15.3
Lectin (H.U./mg sample)*	32.6	13.3	23.5	15.8
Lectin (H.U./mg protein)*	91.7	37.6	66.5	46.6
Trypsin Inhibitor (TIU/mg)**	33.0	34.2	31.5	43.5
Phytic Acid (%)	0.766	0.781	0.814	0.832
Raffinose (%)	0.780	0.779	0.792	0.784
Stachyose (%)	4.15	4.34	4.38	4.21
Minerals (ppm)				
Calcium	2330	2310	2420	2700
Iron	98.5	61.8	69.4	68.1
Magnesium	1960	1820	1860	1950
Phosphorus	4200	4400	4200	4350
Potassium	15600	14500	15500	17000
Isoflavones (mcg/g)				
Daidzein	731	672	652	848
Glycitein	97.7	92.4	99.4	135
Genistein	581	550	504	660
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	0.0289	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.604	0.574	0.650	0.538
Riboflavin/Vitamin B2 (mg/100g)	0.388	0.398	0.324	0.443
Folic Acid/Vitamin B9 (mg/100g)	0.458	0.434	0.399	0.358
Phytonadione/Vitamin K1 (mcg/g)	0.274	0.606	0.450	0.619
Total Tocopherols (mg/100g)				
Alpha Tocopherol	2.09	1.94	2.22	2.57
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	17.3	16.9	17.2	20.7
Delta Tocopherol	8.34	9.16	8.36	9.27

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	8	8	8	8
Sample Description	L10/E08/R1	L10/E08/R2	L10/E08/R3	L10/E08/R4
Covance LIMS #	10200120	10200043	10200218	10200281
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	45.4	44.9	43.6	41.8
Threonine	15.5	15.7	15.6	14.8
Serine	19.3	19.5	19.3	18.5
Glutamic Acid	70.7	69.6	67.2	64.8
Proline	19.9	20.3	19.9	19.0
Glycine	16.8	16.9	16.6	16.0
Alanine	17.3	17.5	17.2	16.4
Cystine	5.70	5.49	5.83	5.92
Valine	18.9	18.8	18.0	17.2
Methionine	5.55	5.22	5.58	5.61
Isoleucine	18.9	19.0	18.4	17.6
Leucine	29.4	29.7	28.7	28.1
Tyrosine	14.8	15.3	14.6	14.0
Phenylalanine	20.3	20.2	19.5	19.1
Lysine	24.0	26.1	26.3	24.0
Histidine	10.4	10.3	10.5	9.65
Arginine	30.1	30.6	29.5	27.5
Tryptophan	6.00	5.94	5.95	5.58

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	8	8	8	8
Sample Description	L10/E08/R1	L10/E08/R2	L10/E08/R3	L10/E08/R4
Covance LIMS #	10200120	10200043	10200218	10200281
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.85	1.93	1.91	2.01
16:1 Palmitoleic	0.0256	0.0262	0.0260	0.0236
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	1.01	0.968	1.04	0.922
18:1 Oleic	5.06	5.33	5.14	5.05
18:2 Linoleic	8.91	9.42	9.15	10.0
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.10	1.16	1.14	1.28
20:0 Arachidic	0.0780	0.0762	0.0803	0.0727
20:1 Eicosenoic	0.0339	0.0386	0.0356	0.0408
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0756	0.0762	0.0776	0.0723

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	9	9	9	9
Sample Description	L01/E09/R1	L01/E09/R2	L01/E09/R3	L01/E09/R4
Covance LIMS #	10200288	10200376	10200124	10200123
Proximate (%)				
Moisture	8.66	8.56	8.05	8.02
Protein	39.0	38.7	39.2	38.9
Total Fat	18.7	17.6	15.8	16.2
Ash	5.46	5.23	5.38	5.68
Carbohydrates	36.9	38.5	39.7	39.2
Acid Detergent Fiber (%)	15.1	11.5	16.7	16.0
Neutral Detergent Fiber (%)	16.2	13.2	17.4	16.7
Lectin (H.U./mg sample)*	12.2	8.18	51.8	55.4
Lectin (H.U./mg protein)*	34.2	23.1	144	154
Trypsin Inhibitor (TIU/mg)**	33.2	28.8	18.9	22.9
Phytic Acid (%)	1.35	1.31	1.36	1.37
Raffinose (%)	0.748	0.764	0.751	0.772
Stachyose (%)	4.13	4.34	4.10	4.28
Minerals (ppm)				
Calcium	3140	3010	3080	3200
Iron	62.5	61.9	57.7	59.0
Magnesium	2410	2360	2530	2490
Phosphorus	5920	6030	6160	6490
Potassium	19400	18800	19500	19900
Isoflavones (mcg/g)				
Daidzein	998	841	905	881
Glycitein	75.8	96.5	94.7	79.1
Genistein	1010	860	887	853
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.384	0.457	0.338	0.320
Riboflavin/Vitamin B2 (mg/100g)	0.394	0.412	0.321	0.401
Folic Acid/Vitamin B9 (mg/100g)	0.385	0.360	0.424	0.434
Phytonadione/Vitamin K1 (mcg/g)	0.307	0.327	0.167	0.184
Total Tocopherols (mg/100g)				
Alpha Tocopherol	1.46	1.54	1.49	1.50
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	14.5	16.2	14.6	15.2
Delta Tocopherol	6.80	7.01	6.72	6.48

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	9	9	9	9
Sample Description	L01/E09/R1	L01/E09/R2	L01/E09/R3	L01/E09/R4
Covance LIMS #	10200288	10200376	10200124	10200123
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	43.8	43.5	44.5	43.9
Threonine	15.7	15.5	15.4	15.2
Serine	18.4	19.0	18.8	18.4
Glutamic Acid	64.5	67.0	67.5	67.1
Proline	19.8	19.7	19.8	19.9
Glycine	16.8	16.5	16.7	16.2
Alanine	17.0	16.8	17.3	17.1
Cystine	5.79	5.85	5.24	5.23
Valine	19.0	18.6	19.2	19.1
Methionine	5.08	5.46	5.41	5.46
Isoleucine	18.8	18.4	18.8	18.6
Leucine	29.6	29.1	29.7	29.2
Tyrosine	14.8	15.1	15.2	14.9
Phenylalanine	20.0	19.4	20.0	19.8
Lysine	24.9	24.6	23.3	24.1
Histidine	10.6	10.2	10.2	10.4
Arginine	28.7	28.7	29.4	28.6
Tryptophan	5.88	5.86	5.84	5.84

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	9	9	9	9
Sample Description	L01/E09/R1	L01/E09/R2	L01/E09/R3	L01/E09/R4
Covance LIMS #	10200288	10200376	10200124	10200123
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.11	1.96	1.78	1.82
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	0.0228	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.788	0.755	0.668	0.674
18:1 Oleic	3.35	3.19	2.87	2.86
18:2 Linoleic	9.78	9.03	8.24	8.51
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.77	1.59	1.47	1.52
20:0 Arachidic	0.0626	0.0627	0.0529	0.0539
20:1 Eicosenoic	0.0310	0.0304	0.0245	0.0252
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0689	0.0688	0.0585	0.0609

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	9	9	9	9
Sample Description	L02/E09/R1	L02/E09/R2	L02/E09/R3	L02/E09/R4
Covance LIMS #	10200079	10200150	10200069	10200345
Proximate (%)				
Moisture	7.00	6.90	6.57	7.49
Protein	39.8	38.3	39.3	39.5
Total Fat	18.8	17.9	18.7	19.5
Ash	5.46	5.48	5.49	5.38
Carbohydrates	35.9	38.2	36.5	35.7
Acid Detergent Fiber (%)	10.8	13.3	12.1	13.4
Neutral Detergent Fiber (%)	12.6	16.1	13.3	15.5
Lectin (H.U./mg sample)*	41.4	15.6	23.8	25.5
Lectin (H.U./mg protein)*	112	43.6	64.8	69.9
Trypsin Inhibitor (TIU/mg)**	38.3	34.0	31.0	38.2
Phytic Acid (%)	1.07	1.16	1.04	0.966
Raffinose (%)	0.822	0.827	0.836	0.811
Stachyose (%)	4.43	4.34	4.21	4.16
Minerals (ppm)				
Calcium	2900	2940	2870	2950
Iron	68.2	69.0	66.5	73.4
Magnesium	2390	2340	2310	2320
Phosphorus	5110	5070	4900	4980
Potassium	19000	18800	18600	19000
Isoflavones (mcg/g)				
Daidzein	924	1070	873	938
Glycitein	79.2	83.6	61.9	76.1
Genistein	835	946	806	846
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.408	0.411	0.420	0.445
Riboflavin/Vitamin B2 (mg/100g)	0.455	0.289	0.298	0.334
Folic Acid/Vitamin B9 (mg/100g)	0.471	0.463	0.412	0.449
Phytonadione/Vitamin K1 (mcg/g)	0.138	0.165	0.298	0.174
Total Tocopherols (mg/100g)				
Alpha Tocopherol	1.96	2.20	1.98	2.09
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	14.5	12.7	14.4	15.7
Delta Tocopherol	5.51	5.42	5.47	5.97

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	9	9	9	9
Sample Description	L02/E09/R1	L02/E09/R2	L02/E09/R3	L02/E09/R4
Covance LIMS #	10200079	10200150	10200069	10200345
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	44.2	44.8	45.2	45.2
Threonine	15.9	15.7	15.9	16.0
Serine	20.2	19.8	19.3	19.2
Glutamic Acid	69.1	69.9	68.5	70.3
Proline	20.0	19.5	21.2	19.7
Glycine	16.7	16.9	17.0	17.1
Alanine	17.5	17.4	17.9	17.3
Cystine	6.35	6.21	6.06	5.78
Valine	18.4	19.4	19.2	20.0
Methionine	5.10	5.65	5.60	5.52
Isoleucine	18.7	18.7	18.8	19.6
Leucine	29.8	29.6	30.2	30.1
Tyrosine	15.2	15.1	15.6	15.5
Phenylalanine	19.8	20.0	20.8	20.2
Lysine	24.7	25.1	24.9	22.9
Histidine	10.5	10.3	10.4	10.6
Arginine	29.9	29.2	30.5	29.6
Tryptophan	5.98	5.65	5.87	6.09

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	9	9	9	9
Sample Description	L02/E09/R1	L02/E09/R2	L02/E09/R3	L02/E09/R4
Covance LIMS #	10200079	10200150	10200069	10200345
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.87	2.02	2.12	2.11
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.758	0.815	0.871	0.847
18:1 Oleic	3.61	3.93	4.09	4.08
18:2 Linoleic	8.41	9.03	9.46	9.26
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.25	1.40	1.41	1.41
20:0 Arachidic	0.0592	0.0640	0.0691	0.0672
20:1 Eicosenoic	0.0282	0.0311	0.0324	0.0336
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0591	0.0657	0.0696	0.0690

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	9	9	9	9
Sample Description	L03/E09/R1	L03/E09/R2	L03/E09/R3	L03/E09/R4
Covance LIMS #	10200354	10200073	10200290	10200224
Proximate (%)				
Moisture	9.19	8.46	9.29	9.37
Protein	42.2	41.4	42.2	43.4
Total Fat	19.4	19.2	19.5	18.5
Ash	5.48	6.19	5.42	5.78
Carbohydrates	32.9	33.2	32.9	32.3
Acid Detergent Fiber (%)	14.5	10.5	10.6	16.3
Neutral Detergent Fiber (%)	15.9	12.5	15.2	16.3
Lectin (H.U./mg sample)*	18.4	12.8	17.7	30.2
Lectin (H.U./mg protein)*	48.0	33.8	46.3	76.9
Trypsin Inhibitor (TIU/mg)**	42.5	60.1	42.2	37.0
Phytic Acid (%)	1.46	1.72	1.48	1.60
Raffinose (%)	1.18	1.15	1.18	1.27
Stachyose (%)	3.95	4.14	4.01	4.23
Minerals (ppm)				
Calcium	3660	3520	3860	3500
Iron	72.7	70.6	70.4	71.7
Magnesium	2940	2820	2860	2800
Phosphorus	6590	7310	6480	6820
Potassium	17700	19200	18100	18200
Isoflavones (mcg/g)				
Daidzein	276	379	449	305
Glycitein	65.9	67.4	88.2	58.8
Genistein	331	348	424	286
Vitamins				
Beta Carotene (mg/100g)	0.0376	0.0369	0.0336	0.0506
Thiamine HCl/Vitamin B1 (mg/100g)	0.515	0.471	0.502	0.521
Riboflavin/Vitamin B2 (mg/100g)	0.348	0.439	0.428	0.402
Folic Acid/Vitamin B9 (mg/100g)	0.406	0.463	0.461	0.467
Phytonadione/Vitamin K1 (mcg/g)	0.511	0.521	0.680	0.721
Total Tocopherols (mg/100g)				
Alpha Tocopherol	4.94	4.37	3.73	4.72
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	15.9	15.2	14.3	14.1
Delta Tocopherol	4.40	4.50	4.46	4.10

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	9	9	9	9
Sample Description	L03/E09/R1	L03/E09/R2	L03/E09/R3	L03/E09/R4
Covance LIMS #	10200354	10200073	10200290	10200224
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	48.9	47.1	47.3	48.1
Threonine	16.7	16.2	16.0	16.0
Serine	20.9	21.4	20.3	20.6
Glutamic Acid	75.0	73.8	72.4	72.9
Proline	22.1	21.4	22.6	21.6
Glycine	18.5	17.6	17.7	17.8
Alanine	18.5	18.2	17.6	18.1
Cystine	6.95	7.07	6.47	6.54
Valine	20.3	19.3	19.4	19.4
Methionine	5.83	5.74	5.73	6.16
Isoleucine	20.5	19.8	20.0	20.1
Leucine	32.0	31.0	31.2	31.0
Tyrosine	16.3	15.9	15.5	15.3
Phenylalanine	21.7	20.8	20.9	20.9
Lysine	27.4	26.0	26.6	26.3
Histidine	11.1	11.0	10.8	10.7
Arginine	33.0	31.5	31.6	32.2
Tryptophan	6.03	5.89	6.01	6.08

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	9	9	9	9
Sample Description	L03/E09/R1	L03/E09/R2	L03/E09/R3	L03/E09/R4
Covance LIMS #	10200354	10200073	10200290	10200224
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.14	2.25	2.22	2.00
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.870	0.930	0.846	0.867
18:1 Oleic	4.76	4.62	4.49	4.60
18:2 Linoleic	8.80	9.34	9.57	8.07
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.24	1.43	1.37	1.20
20:0 Arachidic	0.0770	0.0811	0.0729	0.0755
20:1 Eicosenoic	0.0418	0.0428	0.0420	0.0374
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0815	0.0808	0.0769	0.0779

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	9	9	9	9
Sample Description	L04/E09/R1	L04/E09/R2	L04/E09/R3	L04/E09/R4
Covance LIMS #	10200349	10200204	10200342	10200324
Proximate (%)				
Moisture	8.46	8.89	8.58	8.94
Protein	34.4	37.1	36.9	37.7
Total Fat	20.5	19.1	20.2	20.2
Ash	5.88	5.72	5.62	5.58
Carbohydrates	39.2	38.1	37.3	36.6
Acid Detergent Fiber (%)	14.6	14.0	14.0	16.6
Neutral Detergent Fiber (%)	17.4	15.1	15.5	16.3
Lectin (H.U./mg sample)*	10.7	25.0	31.2	19.5
Lectin (H.U./mg protein)*	34.1	74.1	92.5	57.0
Trypsin Inhibitor (TIU/mg)**	47.5	34.7	42.9	35.1
Phytic Acid (%)	1.54	1.51	1.47	1.49
Raffinose (%)	0.941	0.907	0.919	0.910
Stachyose (%)	4.58	4.21	4.52	4.68
Minerals (ppm)				
Calcium	3290	3190	3150	3020
Iron	74.5	65.4	68.1	65.7
Magnesium	2550	2560	2460	2480
Phosphorus	6750	6550	6320	6390
Potassium	19700	19500	18600	18600
Isoflavones (mcg/g)				
Daidzein	894	808	860	873
Glycitein	131	86.0	120	108
Genistein	766	744	779	791
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.541	0.459	0.552	0.454
Riboflavin/Vitamin B2 (mg/100g)	0.351	0.397	0.410	0.342
Folic Acid/Vitamin B9 (mg/100g)	0.368	0.445	0.558	0.476
Phytonadione/Vitamin K1 (mcg/g)	0.224	0.279	0.320	0.361
Total Tocopherols (mg/100g)				
Alpha Tocopherol	2.71	2.35	2.18	2.17
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	16.7	16.2	15.8	16.3
Delta Tocopherol	5.82	6.23	6.02	6.26

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	9	9	9	9
Sample Description	L04/E09/R1	L04/E09/R2	L04/E09/R3	L04/E09/R4
Covance LIMS #	10200349	10200204	10200342	10200324
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	38.0	42.3	41.3	43.7
Threonine	13.8	15.0	15.0	15.6
Serine	15.8	18.3	17.4	19.2
Glutamic Acid	55.9	63.2	61.6	66.3
Proline	17.3	19.1	18.8	19.4
Glycine	15.1	16.0	16.0	16.5
Alanine	15.4	16.7	16.3	16.9
Cystine	5.49	5.65	5.51	5.95
Valine	17.2	18.3	18.3	18.6
Methionine	5.35	5.53	5.67	5.42
Isoleucine	16.6	18.1	17.7	18.2
Leucine	25.2	28.5	27.7	28.8
Tyrosine	13.4	14.6	14.5	15.0
Phenylalanine	16.7	19.3	18.8	19.1
Lysine	22.3	24.3	24.0	24.6
Histidine	9.03	10.1	9.86	10.0
Arginine	24.0	27.4	27.0	28.0
Tryptophan	5.25	5.38	6.08	6.18

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	9	9	9	9
Sample Description	L04/E09/R1	L04/E09/R2	L04/E09/R3	L04/E09/R4
Covance LIMS #	10200349	10200204	10200342	10200324
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.23	2.07	2.20	2.22
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	0.0219	0.0223
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.865	0.852	0.899	0.921
18:1 Oleic	4.13	3.89	4.13	4.24
18:2 Linoleic	10.1	9.27	10.0	9.97
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.64	1.49	1.60	1.57
20:0 Arachidic	0.0701	0.0705	0.0714	0.0724
20:1 Eicosenoic	0.0374	0.0337	0.0358	0.0347
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0737	0.0743	0.0726	0.0769

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	9	9	9	9
Sample Description	L07/E09/R1	L07/E09/R2	L07/E09/R3	L07/E09/R4
Covance LIMS #	10200053	10200223	10200241	10200366
Proximate (%)				
Moisture	9.75	10.3	10.6	10.2
Protein	37.6	36.3	41.6	36.3
Total Fat	20.7	20.2	21.0	21.4
Ash	6.09	6.49	6.02	5.97
Carbohydrates	35.7	37.0	31.3	36.3
Acid Detergent Fiber (%)	11.5	18.3	14.7	11.2
Neutral Detergent Fiber (%)	13.5	19.6	17.4	13.3
Lectin (H.U./mg sample)*	20.9	20.3	31.4	14.8
Lectin (H.U./mg protein)*	61.8	62.2	84.5	45.4
Trypsin Inhibitor (TIU/mg)**	52.0	44.8	38.0	44.1
Phytic Acid (%)	1.67	1.91	1.76	1.77
Raffinose (%)	1.05	1.07	1.04	1.11
Stachyose (%)	4.16	4.11	3.95	3.80
Minerals (ppm)				
Calcium	3120	3670	3190	3300
Iron	76.0	98.7	76.3	75.6
Magnesium	2910	2930	2910	2750
Phosphorus	7470	8120	7250	7060
Potassium	21100	21500	20800	20700
Isoflavones (mcg/g)				
Daidzein	363	369	424	412
Glycitein	63.6	67.7	87.9	97.8
Genistein	299	314	349	369
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.495	0.749	0.502	0.594
Riboflavin/Vitamin B2 (mg/100g)	0.428	0.479	0.378	0.396
Folic Acid/Vitamin B9 (mg/100g)	0.401	0.360	0.389	0.331
Phytonadione/Vitamin K1 (mcg/g)	0.296	0.458	0.345	0.468
Total Tocopherols (mg/100g)				
Alpha Tocopherol	5.17	5.54	4.93	5.97
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	14.7	14.9	14.2	17.3
Delta Tocopherol	3.90	3.68	3.97	4.31

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	9	9	9	9
Sample Description	L07/E09/R1	L07/E09/R2	L07/E09/R3	L07/E09/R4
Covance LIMS #	10200053	10200223	10200241	10200366
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	43.1	39.2	42.3	41.8
Threonine	15.5	14.0	14.9	14.9
Serine	19.4	16.6	18.6	18.3
Glutamic Acid	66.6	57.7	65.1	64.0
Proline	19.4	17.3	19.0	18.8
Glycine	16.4	15.7	16.0	16.7
Alanine	17.2	16.2	16.7	16.6
Cystine	6.25	6.11	5.97	6.88
Valine	18.2	17.3	18.2	17.9
Methionine	5.32	5.25	5.36	4.99
Isoleucine	18.1	17.2	18.0	17.9
Leucine	28.5	26.2	27.7	27.5
Tyrosine	15.0	13.6	14.3	14.4
Phenylalanine	19.2	17.6	18.3	18.4
Lysine	24.4	24.4	23.8	22.7
Histidine	10.2	10.0	9.64	9.74
Arginine	28.5	25.9	27.0	26.6
Tryptophan	5.85	6.09	5.69	5.55

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	9	9	9	9
Sample Description	L07/E09/R1	L07/E09/R2	L07/E09/R3	L07/E09/R4
Covance LIMS #	10200053	10200223	10200241	10200366
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.37	2.21	2.40	2.45
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	1.14	1.13	1.19	1.15
18:1 Oleic	5.15	5.11	5.29	5.27
18:2 Linoleic	9.55	8.71	9.85	9.98
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.30	1.23	1.34	1.38
20:0 Arachidic	0.100	0.0993	0.102	0.101
20:1 Eicosenoic	0.0461	0.0435	0.0454	0.0478
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0931	0.0926	0.0962	0.0963

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	9	9	9	9
Sample Description	L08/E09/R1	L08/E09/R2	L08/E09/R3	L08/E09/R4
Covance LIMS #	10200369	10200118	10200222	10200143
Proximate (%)				
Moisture	13.9	13.8	14.3	14.0
Protein	40.4	39.2	39.7	39.0
Total Fat	20.6	19.8	19.7	20.0
Ash	4.99	5.31	5.54	5.71
Carbohydrates	34.0	35.6	35.1	35.3
Acid Detergent Fiber (%)	10.4	11.2	13.5	10.2
Neutral Detergent Fiber (%)	12.4	12.8	21.4	13.1
Lectin (H.U./mg sample)*	12.9	22.2	28.1	18.7
Lectin (H.U./mg protein)*	37.0	65.5	82.7	55.9
Trypsin Inhibitor (TIU/mg)**	31.2	34.5	30.7	34.3
Phytic Acid (%)	1.38	1.31	1.42	1.43
Raffinose (%)	0.992	1.01	0.979	0.959
Stachyose (%)	4.11	4.11	4.41	4.02
Minerals (ppm)				
Calcium	2600	2750	2660	2690
Iron	81.1	79.2	78.8	74.4
Magnesium	2420	2550	2490	2570
Phosphorus	5830	6090	6220	6000
Potassium	18200	19000	19100	19000
Isoflavones (mcg/g)				
Daidzein	812	916	929	1060
Glycitein	98.5	90.3	73.5	120
Genistein	675	813	824	886
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.467	0.406	0.370	0.552
Riboflavin/Vitamin B2 (mg/100g)	0.422	0.384	0.454	0.317
Folic Acid/Vitamin B9 (mg/100g)	0.243	0.270	0.242	0.287
Phytonadione/Vitamin K1 (mcg/g)	0.233	0.343	0.288	0.171
Total Tocopherols (mg/100g)				
Alpha Tocopherol	2.78	3.09	2.77	2.31
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	15.6	15.7	14.2	13.0
Delta Tocopherol	5.63	5.56	5.43	5.67

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	9	9	9	9
Sample Description	L08/E09/R1	L08/E09/R2	L08/E09/R3	L08/E09/R4
Covance LIMS #	10200369	10200118	10200222	10200143
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	45.3	45.8	45.2	43.8
Threonine	16.3	16.0	15.5	15.3
Serine	19.7	20.3	18.9	18.7
Glutamic Acid	70.6	72.2	70.5	66.0
Proline	20.4	20.1	19.8	20.1
Glycine	17.0	17.3	17.4	16.9
Alanine	17.8	17.6	18.0	17.4
Cystine	6.32	5.75	6.11	5.43
Valine	19.5	19.6	19.8	18.8
Methionine	5.66	5.64	5.60	5.41
Isoleucine	19.0	19.3	19.8	18.6
Leucine	30.3	30.3	30.2	29.7
Tyrosine	15.4	15.3	15.4	15.0
Phenylalanine	20.7	20.4	20.1	19.8
Lysine	24.7	24.5	26.5	24.5
Histidine	10.6	10.3	10.7	10.4
Arginine	30.7	30.5	30.0	29.7
Tryptophan	5.91	5.90	6.00	5.67

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	9	9	9	9
Sample Description	L08/E09/R1	L08/E09/R2	L08/E09/R3	L08/E09/R4
Covance LIMS #	10200369	10200118	10200222	10200143
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.31	2.20	2.22	2.12
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	1.24	1.14	1.11	1.00
18:1 Oleic	4.56	4.43	4.27	4.05
18:2 Linoleic	9.78	9.49	9.45	9.16
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.54	1.46	1.46	1.40
20:0 Arachidic	0.100	0.0911	0.0883	0.0797
20:1 Eicosenoic	0.0373	0.0348	0.0348	0.0327
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0919	0.0855	0.0805	0.0743

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	9	9	9	9
Sample Description	L09/E09/R1	L09/E09/R2	L09/E09/R3	L09/E09/R4
Covance LIMS #	10200264	10200169	10200186	10200125
Proximate (%)				
Moisture	9.40	9.61	9.62	9.27
Protein	38.4	38.9	39.4	38.5
Total Fat	18.9	18.3	19.1	18.2
Ash	5.87	5.44	5.54	5.36
Carbohydrates	36.9	37.4	36.0	38.0
Acid Detergent Fiber (%)	15.7	13.2	13.5	14.3
Neutral Detergent Fiber (%)	18.9	15.0	14.6	15.8
Lectin (H.U./mg sample)*	19.9	12.9	33.4	53.6
Lectin (H.U./mg protein)*	57.1	36.7	93.8	154
Trypsin Inhibitor (TIU/mg)**	27.3	37.5	35.1	28.5
Phytic Acid (%)	0.996	1.29	1.27	1.25
Raffinose (%)	0.902	0.944	0.988	0.919
Stachyose (%)	4.02	4.25	4.20	4.09
Minerals (ppm)				
Calcium	3440	3340	3670	3470
Iron	72.3	67.7	68.9	68.1
Magnesium	2550	2530	2560	2680
Phosphorus	5720	5450	5630	5700
Potassium	18900	18600	18600	18700
Isoflavones (mcg/g)				
Daidzein	1010	1080	945	877
Glycitein	84.8	81.8	83.9	87.5
Genistein	922	924	830	741
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.472	0.418	0.440	0.434
Riboflavin/Vitamin B2 (mg/100g)	0.417	0.306	0.303	0.402
Folic Acid/Vitamin B9 (mg/100g)	0.392	0.416	0.423	0.423
Phytonadione/Vitamin K1 (mcg/g)	0.352	0.468	0.445	0.288
Total Tocopherols (mg/100g)				
Alpha Tocopherol	2.36	2.38	2.59	2.40
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	15.9	14.8	15.7	14.8
Delta Tocopherol	5.28	4.81	5.18	5.06

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	9	9	9	9
Sample Description	L09/E09/R1	L09/E09/R2	L09/E09/R3	L09/E09/R4
Covance LIMS #	10200264	10200169	10200186	10200125
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	45.3	45.0	44.6	44.5
Threonine	15.8	15.8	15.7	15.8
Serine	20.1	20.0	20.1	19.9
Glutamic Acid	69.3	69.6	68.7	69.2
Proline	19.4	19.9	21.6	19.5
Glycine	16.7	16.8	16.7	16.8
Alanine	17.4	17.4	17.7	17.3
Cystine	5.60	5.54	5.69	5.68
Valine	18.0	19.1	18.7	18.6
Methionine	5.57	5.23	4.98	5.54
Isoleucine	18.2	18.4	18.5	18.2
Leucine	29.6	29.9	29.8	29.3
Tyrosine	15.2	15.5	14.9	15.0
Phenylalanine	20.0	20.4	20.1	19.9
Lysine	25.1	25.7	26.1	23.0
Histidine	10.6	10.4	10.5	10.1
Arginine	28.7	29.6	29.1	29.1
Tryptophan	5.36	5.65	5.44	5.75

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	9	9	9	9
Sample Description	L09/E09/R1	L09/E09/R2	L09/E09/R3	L09/E09/R4
Covance LIMS #	10200264	10200169	10200186	10200125
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.20	2.10	2.24	2.11
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.798	0.768	0.828	0.785
18:1 Oleic	3.89	3.71	3.94	3.85
18:2 Linoleic	9.86	9.28	9.84	9.19
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.43	1.37	1.44	1.31
20:0 Arachidic	0.0653	0.0624	0.0674	0.0637
20:1 Eicosenoic	0.0349	0.0326	0.0362	0.0331
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0689	0.0685	0.0693	0.0675

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	9	9	9	9
Sample Description	L10/E09/R1	L10/E09/R2	L10/E09/R3	L10/E09/R4
Covance LIMS #	10200098	10200173	10200260	10200337
Proximate (%)				
Moisture	8.58	8.13	8.49	8.14
Protein	39.4	40.3	40.3	37.7
Total Fat	18.8	18.7	19.5	20.6
Ash	4.73	4.70	5.14	5.45
Carbohydrates	37.1	36.4	35.1	36.4
Acid Detergent Fiber (%)	15.3	13.6	16.7	16.3
Neutral Detergent Fiber (%)	16.8	14.9	18.2	16.5
Lectin (H.U./mg sample)*	29.5	12.4	16.2	23.0
Lectin (H.U./mg protein)*	82.0	33.5	43.8	66.4
Trypsin Inhibitor (TIU/mg)**	47.1	39.9	26.9	40.6
Phytic Acid (%)	0.954	0.940	1.01	1.16
Raffinose (%)	1.01	1.03	1.01	0.929
Stachyose (%)	4.61	4.64	4.43	4.23
Minerals (ppm)				
Calcium	3300	3300	3410	3450
Iron	64.1	57.8	48.0	58.8
Magnesium	2260	2180	2230	2310
Phosphorus	4900	4710	4960	5410
Potassium	15900	16000	16200	18300
Isoflavones (mcg/g)				
Daidzein	672	593	623	754
Glycitein	70.4	64.4	92.3	113
Genistein	592	545	599	676
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.608	0.577	0.587	0.549
Riboflavin/Vitamin B2 (mg/100g)	0.363	0.337	0.410	0.453
Folic Acid/Vitamin B9 (mg/100g)	0.441	0.425	0.396	0.478
Phytonadione/Vitamin K1 (mcg/g)	0.645	0.561	0.458	0.615
Total Tocopherols (mg/100g)				
Alpha Tocopherol	2.35	2.31	1.40	2.88
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	17.0	17.1	17.2	20.1
Delta Tocopherol	5.40	5.07	9.68	5.65

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	9	9	9	9
Sample Description	L10/E09/R1	L10/E09/R2	L10/E09/R3	L10/E09/R4
Covance LIMS #	10200098	10200173	10200260	10200337
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	45.3	45.4	46.2	41.9
Threonine	15.9	15.9	16.4	15.2
Serine	20.1	18.7	20.5	17.7
Glutamic Acid	70.1	69.1	71.2	61.4
Proline	19.7	20.9	20.8	18.6
Glycine	17.3	17.0	17.4	16.0
Alanine	17.5	18.0	17.7	16.7
Cystine	6.06	5.49	5.96	5.60
Valine	19.0	20.0	19.6	18.4
Methionine	4.78	5.64	5.46	5.31
Isoleucine	18.8	19.8	19.7	18.1
Leucine	29.9	30.8	30.9	28.0
Tyrosine	15.4	15.8	15.8	14.7
Phenylalanine	20.6	20.7	20.8	18.8
Lysine	24.8	26.6	26.2	23.7
Histidine	10.2	10.9	10.6	9.86
Arginine	29.8	31.0	30.9	27.2
Tryptophan	6.20	6.10	5.86	5.87

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	9	9	9	9
Sample Description	L10/E09/R1	L10/E09/R2	L10/E09/R3	L10/E09/R4
Covance LIMS #	10200098	10200173	10200260	10200337
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.05	1.82	2.07	2.19
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.843	0.758	0.831	0.857
18:1 Oleic	4.07	3.69	4.02	4.16
18:2 Linoleic	9.33	8.41	9.50	10.1
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.32	1.18	1.37	1.51
20:0 Arachidic	0.0687	0.0636	0.0692	0.0710
20:1 Eicosenoic	0.0315	0.0322	0.0378	0.0401
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0719	0.0639	0.0720	0.0747

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	10	10	10	10
Sample Description	L01/E10/R1	L01/E10/R2	L01/E10/R3	L01/E10/R4
Covance LIMS #	10200226	10200181	10200261	10200296
Proximate (%)				
Moisture	8.76	8.15	8.26	8.40
Protein	38.4	39.7	38.4	39.3
Total Fat	19.7	19.2	20.1	20.2
Ash	5.30	5.39	5.49	5.05
Carbohydrates	36.6	35.7	36.1	35.5
Acid Detergent Fiber (%)	13.5	12.4	13.3	12.1
Neutral Detergent Fiber (%)	16.0	13.4	16.8	17.0
Lectin (H.U./mg sample)*	34.4	22.0	28.7	6.76
Lectin (H.U./mg protein)*	98.3	60.2	81.4	18.8
Trypsin Inhibitor (TIU/mg)**	27.0	34.3	25.1	34.3
Phytic Acid (%)	1.40	1.35	1.37	1.35
Raffinose (%)	0.744	0.748	0.744	0.742
Stachyose (%)	4.31	4.07	4.15	4.01
Minerals (ppm)				
Calcium	2510	2360	2450	2520
Iron	60.0	61.6	77.2	66.4
Magnesium	2410	2470	2450	2370
Phosphorus	5960	5810	5890	5870
Potassium	17600	17600	17700	17700
Isoflavones (mcg/g)				
Daidzein	722	752	662	608
Glycitein	109	102	118	102
Genistein	1090	1110	1030	1080
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.375	0.355	0.413	0.336
Riboflavin/Vitamin B2 (mg/100g)	0.410	0.297	0.382	0.366
Folic Acid/Vitamin B9 (mg/100g)	0.412	0.400	0.319	0.415
Phytonadione/Vitamin K1 (mcg/g)	0.319	0.250	0.217	0.199
Total Tocopherols (mg/100g)				
Alpha Tocopherol	1.62	1.35	1.42	1.35
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	16.2	15.8	16.0	17.2
Delta Tocopherol	9.88	9.12	9.10	9.67

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	10	10	10	10
Sample Description	L01/E10/R1	L01/E10/R2	L01/E10/R3	L01/E10/R4
Covance LIMS #	10200226	10200181	10200261	10200296
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	42.9	45.0	43.3	41.9
Threonine	15.3	15.9	15.6	14.7
Serine	17.6	19.3	19.6	17.9
Glutamic Acid	64.0	69.0	68.0	63.5
Proline	19.3	20.0	19.6	19.4
Glycine	16.4	16.7	16.6	16.2
Alanine	17.0	17.5	16.8	16.8
Cystine	5.74	5.42	5.53	4.88
Valine	18.5	19.4	18.2	18.2
Methionine	5.48	5.67	5.20	5.34
Isoleucine	18.9	18.6	17.9	17.7
Leucine	28.8	29.9	28.4	27.9
Tyrosine	14.7	15.2	14.8	14.1
Phenylalanine	19.0	20.6	19.0	18.9
Lysine	26.4	25.3	25.2	24.7
Histidine	10.4	10.3	9.84	9.67
Arginine	28.1	29.7	28.3	26.9
Tryptophan	6.08	5.63	5.62	5.84

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	10	10	10	10
Sample Description	L01/E10/R1	L01/E10/R2	L01/E10/R3	L01/E10/R4
Covance LIMS #	10200226	10200181	10200261	10200296
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.24	2.19	2.16	2.26
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	0.0220	< LOQ	< LOQ	0.0224
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.794	0.760	0.759	0.776
18:1 Oleic	3.86	3.84	3.74	3.81
18:2 Linoleic	10.2	9.79	9.68	10.3
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.65	1.60	1.59	1.75
20:0 Arachidic	0.0603	0.0589	0.0589	0.0603
20:1 Eicosenoic	0.0310	0.0285	0.0292	0.0305
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0627	0.0633	0.0580	0.0606

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	10	10	10	10
Sample Description	L02/E10/R1	L02/E10/R2	L02/E10/R3	L02/E10/R4
Covance LIMS #	10200312	10200318	10200358	10200082
Proximate (%)				
Moisture	7.33	7.01	7.31	6.94
Protein	39.1	30.6	39.4	39.0
Total Fat	21.4	21.4	20.9	20.8
Ash	5.03	4.99	4.73	5.23
Carbohydrates	34.5	43.0	35.0	34.9
Acid Detergent Fiber (%)	15.9	14.7	12.0	11.7
Neutral Detergent Fiber (%)	16.3	15.3	16.3	13.2
Lectin (H.U./mg sample)*	19.7	24.3	17.3	41.0
Lectin (H.U./mg protein)*	54.6	85.3	47.3	113
Trypsin Inhibitor (TIU/mg)**	30.3	35.4	26.9	33.0
Phytic Acid (%)	1.11	0.973	1.08	1.06
Raffinose (%)	0.882	0.807	0.824	0.779
Stachyose (%)	4.34	4.26	4.22	4.28
Minerals (ppm)				
Calcium	2440	2530	2490	2570
Iron	72.9	75.1	77.1	78.7
Magnesium	2340	2390	2400	2500
Phosphorus	4990	4940	4910	5080
Potassium	17300	17200	17300	17700
Isoflavones (mcg/g)				
Daidzein	741	880	726	910
Glycitein	96.8	137	86.0	120
Genistein	1090	1220	1090	1240
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.431	0.451	0.407	0.383
Riboflavin/Vitamin B2 (mg/100g)	0.397	0.324	0.325	0.462
Folic Acid/Vitamin B9 (mg/100g)	0.392	0.386	0.450	0.494
Phytonadione/Vitamin K1 (mcg/g)	0.295	0.275	0.258	0.106
Total Tocopherols (mg/100g)				
Alpha Tocopherol	2.22	1.82	2.43	1.89
Beta Tocopherol	< LOQ	< LOQ	< LOQ	0.551
Gamma Tocopherol	16.2	15.9	17.9	15.3
Delta Tocopherol	7.46	7.81	8.12	8.12

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	10	10	10	10
Sample Description	L02/E10/R1	L02/E10/R2	L02/E10/R3	L02/E10/R4
Covance LIMS #	10200312	10200318	10200358	10200082
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	44.5	45.0	44.8	44.9
Threonine	15.8	15.8	15.9	15.8
Serine	18.9	19.5	19.4	19.8
Glutamic Acid	67.1	69.5	68.4	69.4
Proline	20.3	20.6	20.3	19.7
Glycine	16.7	16.7	17.6	16.9
Alanine	17.4	17.6	17.4	17.3
Cystine	5.44	5.81	6.04	6.08
Valine	19.1	19.0	19.1	18.4
Methionine	5.70	5.30	5.25	5.18
Isoleucine	18.6	18.3	19.1	18.7
Leucine	29.4	29.3	29.6	29.4
Tyrosine	15.2	15.2	15.1	15.3
Phenylalanine	19.6	19.7	19.7	19.6
Lysine	23.7	24.5	25.4	25.4
Histidine	10.3	10.2	10.1	10.4
Arginine	30.2	29.7	30.3	29.6
Tryptophan	5.62	5.96	6.00	5.82

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	10	10	10	10
Sample Description	L02/E10/R1	L02/E10/R2	L02/E10/R3	L02/E10/R4
Covance LIMS #	10200312	10200318	10200358	10200082
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.36	2.33	2.27	2.11
16:1 Palmitoleic	0.0219	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	0.0216	0.0219	0.0218	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.951	0.929	0.919	0.808
18:1 Oleic	4.70	4.55	4.52	4.17
18:2 Linoleic	10.4	10.3	10.0	9.36
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.50	1.53	1.45	1.34
20:0 Arachidic	0.0712	0.0700	0.0697	0.0622
20:1 Eicosenoic	0.0333	0.0333	0.0338	0.0314
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0665	0.0667	0.0631	0.0577

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	10	10	10	10
Sample Description	L03/E10/R1	L03/E10/R2	L03/E10/R3	L03/E10/R4
Covance LIMS #	10200066	10200338	10200306	10200160
Proximate (%)				
Moisture	8.38	8.70	8.96	8.93
Protein	39.3	40.3	39.8	39.9
Total Fat	22.2	22.2	22.3	21.7
Ash	5.41	5.13	5.40	5.29
Carbohydrates	33.2	32.3	32.5	33.2
Acid Detergent Fiber (%)	13.1	16.3	18.1	16.3
Neutral Detergent Fiber (%)	14.6	15.8	18.1	15.9
Lectin (H.U./mg sample)*	23.7	22.2	21.2	20.1
Lectin (H.U./mg protein)*	65.8	60.5	58.5	55.3
Trypsin Inhibitor (TIU/mg)**	46.4	51.4	62.1	32.5
Phytic Acid (%)	1.39	1.39	1.26	1.36
Raffinose (%)	1.03	1.16	0.960	1.21
Stachyose (%)	3.90	3.77	4.02	3.83
Minerals (ppm)				
Calcium	3590	3540	3610	3620
Iron	76.4	79.1	75.1	67.6
Magnesium	2520	2420	2520	2460
Phosphorus	6000	5880	6120	5620
Potassium	16500	16000	17200	16500
Isoflavones (mcg/g)				
Daidzein	355	340	232	419
Glycitein	85.1	126	78.3	110
Genistein	595	598	464	670
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	0.0318
Thiamine HCl/Vitamin B1 (mg/100g)	0.474	0.499	0.625	0.471
Riboflavin/Vitamin B2 (mg/100g)	0.410	0.437	0.379	0.365
Folic Acid/Vitamin B9 (mg/100g)	0.368	0.416	0.295	0.390
Phytonadione/Vitamin K1 (mcg/g)	0.544	0.657	0.624	0.662
Total Tocopherols (mg/100g)				
Alpha Tocopherol	3.37	3.59	4.50	3.39
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	19.6	19.2	20.2	19.2
Delta Tocopherol	6.51	6.45	5.49	6.12

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	10	10	10	10
Sample Description	L03/E10/R1	L03/E10/R2	L03/E10/R3	L03/E10/R4
Covance LIMS #	10200066	10200338	10200306	10200160
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	45.5	45.6	45.7	46.3
Threonine	16.0	16.0	15.9	15.9
Serine	20.1	19.6	20.4	20.8
Glutamic Acid	69.6	70.0	70.5	72.6
Proline	21.5	20.5	20.9	20.9
Glycine	17.2	17.4	17.2	17.7
Alanine	18.0	17.5	17.7	17.6
Cystine	6.32	6.16	6.17	6.43
Valine	19.0	19.5	19.0	19.3
Methionine	6.09	5.89	5.77	6.01
Isoleucine	19.1	19.2	18.8	19.0
Leucine	30.0	30.1	29.9	30.3
Tyrosine	15.6	15.6	15.4	15.4
Phenylalanine	20.4	20.5	20.0	20.4
Lysine	25.8	25.1	25.2	26.2
Histidine	10.3	10.5	10.2	10.4
Arginine	29.9	30.3	30.0	30.1
Tryptophan	6.02	5.99	5.70	5.83

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	10	10	10	10
Sample Description	L03/E10/R1	L03/E10/R2	L03/E10/R3	L03/E10/R4
Covance LIMS #	10200066	10200338	10200306	10200160
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.54	2.46	2.54	2.51
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.835	0.838	0.855	0.822
18:1 Oleic	4.77	4.69	4.83	4.51
18:2 Linoleic	11.6	11.1	11.4	11.4
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.40	1.36	1.41	1.39
20:0 Arachidic	0.0678	0.0675	0.0707	0.0652
20:1 Eicosenoic	0.0433	0.0439	0.0460	0.0424
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0718	0.0669	0.0691	0.0696

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	10	10	10	10
Sample Description	L04/E10/R1	L04/E10/R2	L04/E10/R3	L04/E10/R4
Covance LIMS #	10200146	10200213	10200149	10200097
Proximate (%)				
Moisture	8.57	8.88	8.75	8.90
Protein	32.3	33.3	36.3	36.9
Total Fat	22.1	22.2	21.5	21.0
Ash	5.62	5.49	5.29	5.05
Carbohydrates	40.0	39.1	36.9	37.1
Acid Detergent Fiber (%)	17.5	20.6	14.2	17.5
Neutral Detergent Fiber (%)	19.9	17.9	15.6	18.9
Lectin (H.U./mg sample)*	15.4	23.5	17.8	27.9
Lectin (H.U./mg protein)*	52.3	77.5	53.6	83.0
Trypsin Inhibitor (TIU/mg)**	39.9	46.4	29.2	32.8
Phytic Acid (%)	1.66	1.43	1.50	1.41
Raffinose (%)	0.907	0.871	0.828	0.842
Stachyose (%)	4.40	4.24	4.26	4.48
Minerals (ppm)				
Calcium	2970	3010	2730	2830
Iron	74.9	76.9	67.6	62.2
Magnesium	2590	2560	2510	2430
Phosphorus	6730	6650	6280	6290
Potassium	18300	18300	17600	17100
Isoflavones (mcg/g)				
Daidzein	666	664	622	544
Glycitein	177	167	134	145
Genistein	836	829	865	696
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.537	0.562	0.415	0.504
Riboflavin/Vitamin B2 (mg/100g)	0.320	0.347	0.362	0.349
Folic Acid/Vitamin B9 (mg/100g)	0.317	0.315	0.397	0.414
Phytonadione/Vitamin K1 (mcg/g)	0.215	0.210	0.176	0.440
Total Tocopherols (mg/100g)				
Alpha Tocopherol	2.17	2.34	1.69	2.13
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	18.8	20.6	15.9	19.1
Delta Tocopherol	8.37	8.74	8.13	8.36

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	10	10	10	10
Sample Description	L04/E10/R1	L04/E10/R2	L04/E10/R3	L04/E10/R4
Covance LIMS #	10200146	10200213	10200149	10200097
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	36.0	37.3	41.8	41.7
Threonine	13.3	13.7	15.0	15.1
Serine	15.7	16.5	18.5	17.7
Glutamic Acid	51.8	53.9	64.3	61.7
Proline	15.7	16.9	18.7	18.9
Glycine	13.8	14.6	15.7	15.9
Alanine	14.4	15.3	16.2	16.6
Cystine	5.95	5.77	6.37	6.28
Valine	15.4	15.6	17.8	17.9
Methionine	5.06	5.23	5.33	4.77
Isoleucine	15.4	15.6	17.5	17.6
Leucine	23.8	24.9	27.7	27.7
Tyrosine	12.6	12.6	14.2	14.4
Phenylalanine	15.6	16.4	18.4	18.7
Lysine	19.8	22.2	23.2	24.6
Histidine	8.05	8.74	9.39	9.48
Arginine	22.5	23.5	26.7	26.9
Tryptophan	5.10	4.99	5.40	5.89

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	10	10	10	10
Sample Description	L04/E10/R1	L04/E10/R2	L04/E10/R3	L04/E10/R4
Covance LIMS #	10200146	10200213	10200149	10200097
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.31	2.35	2.38	2.17
16:1 Palmitoleic	< LOQ	< LOQ	0.0222	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	0.0225	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.848	0.860	0.891	0.834
18:1 Oleic	4.54	4.51	4.65	4.17
18:2 Linoleic	10.8	11.0	11.1	10.0
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.59	1.61	1.59	1.45
20:0 Arachidic	0.0667	0.0664	0.0686	0.0643
20:1 Eicosenoic	0.0395	0.0381	0.0366	0.0304
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0654	0.0677	0.0670	0.0631

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	10	10	10	10
Sample Description	L07/E10/R1	L07/E10/R2	L07/E10/R3	L07/E10/R4
Covance LIMS #	10200279	10200268	10200179	10200042
Proximate (%)				
Moisture	11.6	10.4	10.5	10.4
Protein	38.1	32.5	37.0	35.4
Total Fat	22.6	25.0	22.5	23.3
Ash	6.10	6.44	6.07	6.12
Carbohydrates	33.1	36.0	34.5	35.2
Acid Detergent Fiber (%)	17.9	17.2	15.4	14.4
Neutral Detergent Fiber (%)	16.9	19.5	16.2	15.8
Lectin (H.U./mg sample)*	14.8	20.6	31.1	14.5
Lectin (H.U./mg protein)*	44.0	71.0	93.9	45.8
Trypsin Inhibitor (TIU/mg)**	50.1	44.2	44.6	46.1
Phytic Acid (%)	1.63	1.84	1.80	1.86
Raffinose (%)	1.03	0.974	1.08	1.04
Stachyose (%)	3.63	3.58	3.88	3.81
Minerals (ppm)				
Calcium	2870	3480	3220	3130
Iron	83.7	110	77.0	82.6
Magnesium	2840	3090	2820	2920
Phosphorus	7230	8110	7330	7670
Potassium	20200	20000	20200	20500
Isoflavones (mcg/g)				
Daidzein	340	272	331	307
Glycitein	106	129	112	122
Genistein	329	319	337	334
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.410	0.771	0.454	0.487
Riboflavin/Vitamin B2 (mg/100g)	0.434	0.489	0.347	0.386
Folic Acid/Vitamin B9 (mg/100g)	0.340	0.307	0.359	0.296
Phytonadione/Vitamin K1 (mcg/g)	0.368	0.353	0.399	0.547
Total Tocopherols (mg/100g)				
Alpha Tocopherol	6.89	6.77	6.37	6.24
Beta Tocopherol	0.589	0.636	0.629	< LOQ
Gamma Tocopherol	16.2	20.6	18.0	17.4
Delta Tocopherol	3.88	5.47	4.50	4.50

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	10	10	10	10
Sample Description	L07/E10/R1	L07/E10/R2	L07/E10/R3	L07/E10/R4
Covance LIMS #	10200279	10200268	10200179	10200042
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	42.1	35.8	42.8	40.3
Threonine	15.2	13.3	15.3	14.7
Serine	18.6	16.3	19.6	17.7
Glutamic Acid	64.0	52.6	66.6	61.3
Proline	18.8	15.6	19.2	18.9
Glycine	16.2	13.8	16.4	15.7
Alanine	17.1	14.8	17.0	16.1
Cystine	6.29	5.73	6.32	5.79
Valine	17.8	15.0	18.0	17.4
Methionine	5.58	4.53	5.71	4.80
Isoleucine	17.6	15.0	17.7	17.2
Leucine	27.8	23.8	28.0	26.9
Tyrosine	14.1	12.4	14.6	14.2
Phenylalanine	19.0	15.7	18.7	18.2
Lysine	22.6	21.0	24.9	24.2
Histidine	10.0	8.92	10.0	9.99
Arginine	27.7	22.1	27.5	26.5
Tryptophan	5.33	5.03	5.34	5.54

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	10	10	10	10
Sample Description	L07/E10/R1	L07/E10/R2	L07/E10/R3	L07/E10/R4
Covance LIMS #	10200279	10200268	10200179	10200042
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	0.0231	0.0246	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.58	2.81	2.48	2.58
16:1 Palmitoleic	0.0232	0.0239	< LOQ	0.0227
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	1.10	1.15	1.08	1.10
18:1 Oleic	5.69	6.34	5.44	5.75
18:2 Linoleic	10.8	12.3	10.5	10.7
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.31	1.51	1.27	1.32
20:0 Arachidic	0.0934	0.0989	0.0909	0.0939
20:1 Eicosenoic	0.0514	0.0565	0.0477	0.0509
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0814	0.0886	0.0836	0.0819

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	10	10	10	10
Sample Description	L08/E10/R1	L08/E10/R2	L08/E10/R3	L08/E10/R4
Covance LIMS #	10200293	10200202	10200207	10200068
Proximate (%)				
Moisture	13.5	13.7	13.8	13.2
Protein	38.7	39.4	39.3	38.4
Total Fat	21.2	21.1	20.5	21.4
Ash	4.97	5.08	5.22	5.66
Carbohydrates	35.1	34.4	34.9	34.6
Acid Detergent Fiber (%)	13.4	14.8	14.7	11.9
Neutral Detergent Fiber (%)	17.7	15.3	15.4	13.5
Lectin (H.U./mg sample)*	6.98	21.1	6.06	19.5
Lectin (H.U./mg protein)*	20.8	62.0	17.9	58.5
Trypsin Inhibitor (TIU/mg)**	46.9	35.7	39.9	29.0
Phytic Acid (%)	1.38	1.23	1.26	1.41
Raffinose (%)	0.971	0.970	1.02	0.869
Stachyose (%)	4.23	4.16	4.20	4.29
Minerals (ppm)				
Calcium	2360	2270	2240	2260
Iron	93.2	80.5	80.5	78.1
Magnesium	2470	2460	2490	2530
Phosphorus	5940	5940	5900	6040
Potassium	17200	17800	17200	17700
Isoflavones (mcg/g)				
Daidzein	541	676	767	669
Glycitein	105	112	107	93.1
Genistein	862	1030	1080	960
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.386	0.437	0.320	0.344
Riboflavin/Vitamin B2 (mg/100g)	0.413	0.399	0.292	0.415
Folic Acid/Vitamin B9 (mg/100g)	0.224	0.251	0.253	0.293
Phytonadione/Vitamin K1 (mcg/g)	0.131	0.144	0.130	0.194
Total Tocopherols (mg/100g)				
Alpha Tocopherol	3.73	2.87	3.00	2.63
Beta Tocopherol	0.601	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	18.0	16.7	16.5	15.9
Delta Tocopherol	6.86	6.87	7.48	7.05

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	10	10	10	10
Sample Description	L08/E10/R1	L08/E10/R2	L08/E10/R3	L08/E10/R4
Covance LIMS #	10200293	10200202	10200207	10200068
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	42.8	43.0	43.4	43.5
Threonine	15.4	15.5	15.7	15.8
Serine	18.3	18.2	18.4	18.4
Glutamic Acid	66.4	65.0	66.4	67.2
Proline	19.3	19.4	20.3	20.5
Glycine	16.5	16.9	16.8	16.7
Alanine	17.5	17.3	17.5	17.9
Cystine	5.94	5.37	5.42	5.85
Valine	18.7	18.2	19.0	19.1
Methionine	5.17	5.70	5.43	5.86
Isoleucine	18.7	17.8	18.9	18.7
Leucine	28.8	29.1	29.7	29.5
Tyrosine	14.7	14.6	15.1	15.3
Phenylalanine	19.3	20.0	20.0	20.3
Lysine	24.3	24.1	25.6	23.3
Histidine	10.2	10.0	10.4	10.4
Arginine	29.0	29.0	30.0	30.1
Tryptophan	5.70	5.54	5.65	5.98

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	10	10	10	10
Sample Description	L08/E10/R1	L08/E10/R2	L08/E10/R3	L08/E10/R4
Covance LIMS #	10200293	10200202	10200207	10200068
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.17	2.20	2.18	2.29
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	1.03	1.02	0.983	1.06
18:1 Oleic	4.43	4.46	4.37	4.70
18:2 Linoleic	9.87	10.2	10.0	10.7
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.45	1.43	1.42	1.45
20:0 Arachidic	0.0801	0.0782	0.0756	0.0813
20:1 Eicosenoic	0.0369	0.0351	0.0335	0.0347
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0677	0.0689	0.0679	0.0740

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	10	10	10	10
Sample Description	L09/E10/R1	L09/E10/R2	L09/E10/R3	L09/E10/R4
Covance LIMS #	10200299	10200314	10200374	10200158
Proximate (%)				
Moisture	9.78	9.40	9.63	9.32
Protein	38.0	38.7	37.7	38.4
Total Fat	21.7	22.0	21.9	20.5
Ash	5.09	5.12	4.88	5.08
Carbohydrates	35.1	34.2	35.5	36.1
Acid Detergent Fiber (%)	15.3	15.8	11.3	16.0
Neutral Detergent Fiber (%)	15.0	16.8	14.8	18.0
Lectin (H.U./mg sample)*	9.29	22.1	14.1	14.8
Lectin (H.U./mg protein)*	27.0	62.9	41.2	42.5
Trypsin Inhibitor (TIU/mg)**	32.5	24.7	31.5	31.9
Phytic Acid (%)	1.23	1.24	1.22	1.37
Raffinose (%)	0.921	0.958	0.958	0.933
Stachyose (%)	4.12	4.24	4.26	4.23
Minerals (ppm)				
Calcium	2970	2910	2820	3150
Iron	74.8	73.2	76.1	77.3
Magnesium	2570	2530	2510	2510
Phosphorus	5620	5540	5270	5790
Potassium	17700	17100	16600	17200
Isoflavones (mcg/g)				
Daidzein	666	757	731	479
Glycitein	123	141	132	119
Genistein	1020	1060	1040	758
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.407	0.439	0.486	0.441
Riboflavin/Vitamin B2 (mg/100g)	0.270	0.342	0.419	0.356
Folic Acid/Vitamin B9 (mg/100g)	0.356	0.347	0.429	0.378
Phytonadione/Vitamin K1 (mcg/g)	0.227	0.398	0.378	0.478
Total Tocopherols (mg/100g)				
Alpha Tocopherol	2.41	2.52	2.61	2.36
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	18.8	18.7	19.9	17.8
Delta Tocopherol	7.02	7.19	7.60	6.47

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	10	10	10	10
Sample Description	L09/E10/R1	L09/E10/R2	L09/E10/R3	L09/E10/R4
Covance LIMS #	10200299	10200314	10200374	10200158
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	42.2	44.4	43.3	45.0
Threonine	14.9	15.7	15.6	15.7
Serine	18.6	19.1	19.0	19.6
Glutamic Acid	65.4	66.8	67.3	69.3
Proline	19.6	20.4	19.4	20.2
Glycine	16.4	16.7	16.5	17.2
Alanine	16.7	17.4	16.7	17.4
Cystine	5.54	5.54	5.94	5.86
Valine	18.4	18.9	18.7	19.0
Methionine	5.34	5.67	5.52	5.72
Isoleucine	18.0	18.4	18.1	18.7
Leucine	28.2	29.1	28.7	29.8
Tyrosine	14.4	15.1	14.9	15.1
Phenylalanine	19.0	19.4	19.5	20.0
Lysine	24.7	24.5	24.3	25.8
Histidine	9.51	10.1	9.86	10.2
Arginine	26.9	29.5	28.2	28.9
Tryptophan	5.63	5.71	5.85	5.99

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	10	10	10	10
Sample Description	L09/E10/R1	L09/E10/R2	L09/E10/R3	L09/E10/R4
Covance LIMS #	10200299	10200314	10200374	10200158
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.54	2.51	2.49	2.37
16:1 Palmitoleic	0.0236	0.0227	0.0228	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.847	0.838	0.835	0.816
18:1 Oleic	4.84	4.57	4.58	4.37
18:2 Linoleic	11.2	11.0	11.1	10.4
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.47	1.43	1.44	1.42
20:0 Arachidic	0.0661	0.0645	0.0664	0.0647
20:1 Eicosenoic	0.0398	0.0371	0.0390	0.0355
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0641	0.0675	0.0655	0.0639

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	10	10	10	10
Sample Description	L10/E10/R1	L10/E10/R2	L10/E10/R3	L10/E10/R4
Covance LIMS #	10200170	10200334	10200300	10200236
Proximate (%)				
Moisture	7.99	8.12	8.27	8.38
Protein	38.7	38.5	37.5	32.3
Total Fat	20.8	22.0	22.1	21.8
Ash	4.80	4.33	4.51	4.65
Carbohydrates	35.8	35.2	35.9	41.3
Acid Detergent Fiber (%)	14.7	16.8	12.5	17.0
Neutral Detergent Fiber (%)	16.5	16.4	18.4	19.3
Lectin (H.U./mg sample)*	12.3	13.1	9.23	31.1
Lectin (H.U./mg protein)*	34.5	36.9	26.8	105
Trypsin Inhibitor (TIU/mg)**	34.1	40.7	39.6	29.7
Phytic Acid (%)	0.868	0.899	0.856	0.876
Raffinose (%)	1.05	1.01	0.994	0.987
Stachyose (%)	4.63	4.64	4.56	4.74
Minerals (ppm)				
Calcium	2720	2740	2810	2850
Iron	67.6	74.0	63.6	89.7
Magnesium	2090	1950	2130	2060
Phosphorus	4650	4630	4510	4480
Potassium	15400	14300	16200	15600
Isoflavones (mcg/g)				
Daidzein	491	387	450	410
Glycitein	135	109	136	93.6
Genistein	584	565	694	557
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.571	0.598	0.554	0.522
Riboflavin/Vitamin B2 (mg/100g)	0.359	0.461	0.360	0.439
Folic Acid/Vitamin B9 (mg/100g)	0.408	0.393	0.367	0.419
Phytonadione/Vitamin K1 (mcg/g)	0.406	0.549	0.280	0.482
Total Tocopherols (mg/100g)				
Alpha Tocopherol	2.38	2.44	2.32	2.42
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	19.8	20.9	16.7	18.6
Delta Tocopherol	6.58	7.29	7.65	7.04

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	10	10	10	10
Sample Description	L10/E10/R1	L10/E10/R2	L10/E10/R3	L10/E10/R4
Covance LIMS #	10200170	10200334	10200300	10200236
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	43.9	43.6	41.6	43.8
Threonine	15.8	15.7	15.0	15.7
Serine	19.6	18.8	19.0	19.6
Glutamic Acid	68.1	66.7	61.6	67.9
Proline	19.7	19.8	18.3	19.3
Glycine	16.5	16.9	16.5	16.5
Alanine	17.5	17.5	17.0	17.2
Cystine	5.65	5.27	5.36	5.88
Valine	18.9	19.3	18.5	18.7
Methionine	5.29	5.18	5.04	5.63
Isoleucine	18.5	18.9	17.9	18.4
Leucine	29.0	28.8	27.8	28.9
Tyrosine	15.2	15.2	14.3	15.1
Phenylalanine	19.5	19.0	18.5	19.1
Lysine	25.2	24.1	23.4	25.1
Histidine	10.1	10.2	9.10	10.1
Arginine	29.2	29.0	26.7	28.2
Tryptophan	5.83	6.01	5.49	5.49

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	10	10	10	10
Sample Description	L10/E10/R1	L10/E10/R2	L10/E10/R3	L10/E10/R4
Covance LIMS #	10200170	10200334	10200300	10200236
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.21	2.24	2.35	2.31
16:1 Palmitoleic	< LOQ	0.0227	0.0221	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	0.0218
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.848	0.855	0.881	0.880
18:1 Oleic	4.54	4.67	4.83	4.76
18:2 Linoleic	10.4	10.9	11.2	11.1
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.38	1.39	1.49	1.47
20:0 Arachidic	0.0678	0.0681	0.0691	0.0711
20:1 Eicosenoic	0.0372	0.0395	0.0414	0.0418
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0698	0.0667	0.0678	0.0693

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	11	11	11	11
Sample Description	L01/E11/R1	L01/E11/R2	L01/E11/R3	L01/E11/R4
Covance LIMS #	10200163	10200267	10200333	10200041
Proximate (%)				
Moisture	8.31	8.14	8.44	7.88
Protein	39.0	39.4	39.0	38.9
Total Fat	17.2	18.6	18.9	18.2
Ash	5.30	5.36	5.33	5.21
Carbohydrates	38.4	36.6	36.8	37.7
Acid Detergent Fiber (%)	13.3	15.7	18.5	9.38
Neutral Detergent Fiber (%)	14.8	15.9	18.1	11.4
Lectin (H.U./mg sample)*	19.1	21.4	21.7	19.9
Lectin (H.U./mg protein)*	53.3	59.2	60.8	55.5
Trypsin Inhibitor (TIU/mg)**	29.0	23.9	25.0	27.7
Phytic Acid (%)	1.35	1.06	1.27	1.30
Raffinose (%)	0.802	0.824	0.816	0.762
Stachyose (%)	4.77	4.70	4.81	4.75
Minerals (ppm)				
Calcium	2650	2600	2690	2620
Iron	64.2	59.5	61.9	64.9
Magnesium	2410	2360	2370	2390
Phosphorus	5740	5560	5590	5690
Potassium	17900	17900	17900	17800
Isoflavones (mcg/g)				
Daidzein	1110	993	1110	946
Glycitein	103	108	107	102
Genistein	1100	1060	1190	994
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.320	0.318	0.357	0.302
Riboflavin/Vitamin B2 (mg/100g)	0.349	0.459	0.433	0.375
Folic Acid/Vitamin B9 (mg/100g)	0.399	0.427	0.469	0.300
Phytonadione/Vitamin K1 (mcg/g)	0.397	0.292	0.380	0.459
Total Tocopherols (mg/100g)				
Alpha Tocopherol	1.24	1.15	1.26	1.19
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	16.6	16.7	18.0	15.3
Delta Tocopherol	7.66	7.95	8.13	8.10

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	11	11	11	11
Sample Description	L01/E11/R1	L01/E11/R2	L01/E11/R3	L01/E11/R4
Covance LIMS #	10200163	10200267	10200333	10200041
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	45.2	44.5	45.0	44.7
Threonine	15.9	15.9	16.2	16.2
Serine	19.8	19.7	19.3	19.5
Glutamic Acid	69.5	68.9	69.7	69.8
Proline	20.0	19.8	20.3	20.2
Glycine	17.5	16.8	17.1	16.8
Alanine	17.7	17.4	17.8	17.6
Cystine	5.65	5.05	5.28	5.44
Valine	19.1	18.2	19.7	19.2
Methionine	5.43	5.38	5.62	5.58
Isoleucine	18.5	18.4	18.9	19.0
Leucine	29.8	29.7	30.0	30.3
Tyrosine	15.3	15.1	15.5	15.8
Phenylalanine	20.2	20.0	20.3	20.6
Lysine	26.2	26.3	25.0	25.7
Histidine	10.4	10.4	10.3	10.7
Arginine	29.3	28.8	29.6	30.2
Tryptophan	5.66	5.40	5.95	5.81

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	11	11	11	11
Sample Description	L01/E11/R1	L01/E11/R2	L01/E11/R3	L01/E11/R4
Covance LIMS #	10200163	10200267	10200333	10200041
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.78	1.88	1.83	1.86
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.659	0.718	0.703	0.731
18:1 Oleic	2.99	3.29	3.20	3.25
18:2 Linoleic	9.25	10.2	9.76	9.42
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.67	1.79	1.68	1.72
20:0 Arachidic	0.0485	0.0531	0.0522	0.0560
20:1 Eicosenoic	0.0253	0.0285	0.0288	0.0281
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0557	0.0570	0.0556	0.0583

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	11	11	11	11
Sample Description	L02/E11/R1	L02/E11/R2	L02/E11/R3	L02/E11/R4
Covance LIMS #	10200235	10200155	10200211	10200339
Proximate (%)				
Moisture	7.54	7.22	7.32	7.11
Protein	33.0	39.7	39.9	39.7
Total Fat	20.0	16.3	18.8	20.1
Ash	5.05	5.00	5.14	5.08
Carbohydrates	42.0	39.0	36.1	35.1
Acid Detergent Fiber (%)	13.8	11.7	13.8	13.5
Neutral Detergent Fiber (%)	15.9	13.9	15.2	15.2
Lectin (H.U./mg sample)*	30.8	17.4	12.0	21.6
Lectin (H.U./mg protein)*	101	47.2	32.4	58.7
Trypsin Inhibitor (TIU/mg)**	30.4	26.7	38.0	38.2
Phytic Acid (%)	0.941	0.971	0.993	0.962
Raffinose (%)	0.944	0.871	0.901	0.852
Stachyose (%)	4.75	4.47	4.64	4.50
Minerals (ppm)				
Calcium	2670	2530	2590	2650
Iron	74.1	68.9	70.8	81.0
Magnesium	2230	2200	2240	2270
Phosphorus	4760	4620	4820	4660
Potassium	18500	17200	18000	17400
Isoflavones (mcg/g)				
Daidzein	1000	1060	1170	1010
Glycitein	110	95.6	151	100
Genistein	918	981	989	1020
Vitamins				
Beta Carotene (mg/100g)	0.0319	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.397	0.408	0.359	0.417
Riboflavin/Vitamin B2 (mg/100g)	0.445	0.354	0.347	0.446
Folic Acid/Vitamin B9 (mg/100g)	0.403	0.452	0.408	0.524
Phytonadione/Vitamin K1 (mcg/g)	0.398	0.467	0.182	0.222
Total Tocopherols (mg/100g)				
Alpha Tocopherol	1.77	1.54	1.73	1.72
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	16.1	14.6	16.6	17.3
Delta Tocopherol	6.57	6.49	6.54	7.08

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	11	11	11	11
Sample Description	L02/E11/R1	L02/E11/R2	L02/E11/R3	L02/E11/R4
Covance LIMS #	10200235	10200155	10200211	10200339
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	46.6	45.6	44.3	45.4
Threonine	16.4	16.0	15.9	16.1
Serine	20.3	19.5	19.0	19.3
Glutamic Acid	73.0	69.5	66.5	70.2
Proline	21.2	20.3	20.2	20.5
Glycine	17.4	17.2	16.8	17.2
Alanine	18.1	17.7	17.6	17.7
Cystine	5.78	5.92	5.23	5.48
Valine	19.8	19.5	18.7	19.9
Methionine	6.19	5.87	5.50	5.81
Isoleucine	19.8	19.2	18.6	19.4
Leucine	30.8	30.2	29.6	30.3
Tyrosine	15.8	15.5	15.0	15.6
Phenylalanine	20.5	20.4	20.2	20.8
Lysine	26.4	25.8	25.4	25.3
Histidine	10.4	10.4	10.5	10.4
Arginine	30.7	29.9	29.9	30.1
Tryptophan	5.71	5.84	5.50	6.05

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	11	11	11	11
Sample Description	L02/E11/R1	L02/E11/R2	L02/E11/R3	L02/E11/R4
Covance LIMS #	10200235	10200155	10200211	10200339
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.98	1.65	1.82	1.93
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.853	0.691	0.788	0.828
18:1 Oleic	4.20	3.46	3.86	4.21
18:2 Linoleic	10.4	8.49	9.46	10.1
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.55	1.28	1.45	1.55
20:0 Arachidic	0.0632	0.0507	0.0578	0.0603
20:1 Eicosenoic	0.0341	0.0266	0.0304	0.0334
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0589	0.0513	0.0554	0.0581

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	11	11	11	11
Sample Description	L03/E11/R1	L03/E11/R2	L03/E11/R3	L03/E11/R4
Covance LIMS #	10200341	10200044	10200157	10200311
Proximate (%)				
Moisture	8.45	9.05	8.71	8.61
Protein	40.0	40.2	40.7	39.4
Total Fat	21.1	21.0	20.3	21.8
Ash	5.24	4.98	5.02	5.21
Carbohydrates	33.8	33.8	34.0	33.6
Acid Detergent Fiber (%)	13.5	15.0	12.4	15.9
Neutral Detergent Fiber (%)	16.4	16.4	14.3	16.4
Lectin (H.U./mg sample)*	33.1	15.4	25.2	24.3
Lectin (H.U./mg protein)*	90.4	42.1	67.7	67.5
Trypsin Inhibitor (TIU/mg)**	48.3	42.3	28.0	46.8
Phytic Acid (%)	1.30	1.33	1.30	1.19
Raffinose (%)	1.15	1.21	1.27	1.16
Stachyose (%)	4.50	4.57	4.49	4.56
Minerals (ppm)				
Calcium	3390	3470	3430	3100
Iron	73.2	69.7	61.8	67.3
Magnesium	2520	2540	2480	2420
Phosphorus	5760	5850	5660	5650
Potassium	16500	16300	16700	17200
Isoflavones (mcg/g)				
Daidzein	649	644	696	615
Glycitein	137	113	101	108
Genistein	656	699	727	722
Vitamins				
Beta Carotene (mg/100g)	< LOQ	0.0306	< LOQ	0.0276
Thiamine HCl/Vitamin B1 (mg/100g)	0.500	0.460	0.432	0.481
Riboflavin/Vitamin B2 (mg/100g)	0.464	0.366	0.326	0.417
Folic Acid/Vitamin B9 (mg/100g)	0.470	0.376	0.468	0.417
Phytonadione/Vitamin K1 (mcg/g)	0.481	0.886	0.757	0.669
Total Tocopherols (mg/100g)				
Alpha Tocopherol	3.50	2.97	3.13	4.30
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	20.0	19.9	20.4	21.6
Delta Tocopherol	5.11	5.54	5.32	4.79

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	11	11	11	11
Sample Description	L03/E11/R1	L03/E11/R2	L03/E11/R3	L03/E11/R4
Covance LIMS #	10200341	10200044	10200157	10200311
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	45.9	46.4	48.2	45.1
Threonine	16.1	16.4	16.4	15.8
Serine	19.7	20.2	21.1	20.1
Glutamic Acid	71.4	71.9	74.6	70.1
Proline	20.0	22.0	21.6	20.7
Glycine	17.6	17.5	18.0	17.2
Alanine	17.5	17.9	18.0	17.6
Cystine	5.88	6.05	6.27	5.86
Valine	19.9	19.8	20.0	19.3
Methionine	5.59	5.93	6.15	5.45
Isoleucine	19.7	20.0	19.9	18.9
Leucine	30.1	31.0	31.4	29.8
Tyrosine	15.7	16.2	16.0	15.5
Phenylalanine	20.6	21.1	21.7	20.0
Lysine	23.8	27.2	27.2	25.5
Histidine	10.4	10.8	10.8	10.1
Arginine	29.3	31.1	31.0	28.1
Tryptophan	5.85	6.20	6.00	5.88

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	11	11	11	11
Sample Description	L03/E11/R1	L03/E11/R2	L03/E11/R3	L03/E11/R4
Covance LIMS #	10200341	10200044	10200157	10200311
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.06	1.99	1.95	2.10
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.744	0.737	0.707	0.780
18:1 Oleic	4.28	4.21	4.11	4.46
18:2 Linoleic	10.9	10.5	10.5	11.3
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.44	1.40	1.39	1.53
20:0 Arachidic	0.0591	0.0573	0.0542	0.0614
20:1 Eicosenoic	0.0427	0.0405	0.0379	0.0430
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0629	0.0608	0.0620	0.0681

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	11	11	11	11
Sample Description	L04/E11/R1	L04/E11/R2	L04/E11/R3	L04/E11/R4
Covance LIMS #	10200175	10200380	10200129	10200326
Proximate (%)				
Moisture	8.84	8.94	9.09	9.08
Protein	35.3	33.7	36.5	34.5
Total Fat	20.1	21.1	19.9	22.2
Ash	5.55	5.08	5.02	5.21
Carbohydrates	39.1	40.1	38.6	38.1
Acid Detergent Fiber (%)	15.4	15.2	19.0	16.9
Neutral Detergent Fiber (%)	16.9	15.6	19.6	18.0
Lectin (H.U./mg sample)*	37.0	8.17	14.3	24.5
Lectin (H.U./mg protein)*	115	26.6	43.1	78.1
Trypsin Inhibitor (TIU/mg)**	35.1	38.4	29.5	40.8
Phytic Acid (%)	1.39	1.34	1.39	1.44
Raffinose (%)	0.862	0.911	0.901	0.958
Stachyose (%)	4.86	4.99	4.98	4.99
Minerals (ppm)				
Calcium	2870	2680	2580	2730
Iron	69.2	72.2	62.4	68.0
Magnesium	2460	2490	2530	2310
Phosphorus	6020	6130	6190	6100
Potassium	18000	17500	17400	16800
Isoflavones (mcg/g)				
Daidzein	1230	1200	1170	1080
Glycitein	143	127	151	136
Genistein	1120	1190	1050	1050
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.454	0.562	0.401	0.487
Riboflavin/Vitamin B2 (mg/100g)	0.328	0.372	0.473	0.392
Folic Acid/Vitamin B9 (mg/100g)	0.386	0.417	0.412	0.411
Phytonadione/Vitamin K1 (mcg/g)	0.417	0.434	0.496	0.455
Total Tocopherols (mg/100g)				
Alpha Tocopherol	2.02	2.03	1.41	1.64
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	20.7	21.9	17.3	19.5
Delta Tocopherol	8.10	8.40	7.51	7.80

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	11	11	11	11
Sample Description	L04/E11/R1	L04/E11/R2	L04/E11/R3	L04/E11/R4
Covance LIMS #	10200175	10200380	10200129	10200326
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	40.4	37.7	41.0	39.4
Threonine	14.8	14.3	14.8	14.7
Serine	18.1	16.7	17.6	17.4
Glutamic Acid	61.9	56.6	61.9	58.7
Proline	17.8	16.8	18.3	17.8
Glycine	15.5	14.7	15.4	15.3
Alanine	16.5	15.2	16.4	16.2
Cystine	6.03	6.00	6.13	5.83
Valine	17.8	16.4	17.7	17.3
Methionine	4.98	5.18	5.58	5.46
Isoleucine	17.1	16.0	17.5	16.8
Leucine	27.0	25.0	27.2	26.1
Tyrosine	14.2	13.5	14.3	14.0
Phenylalanine	18.0	16.9	18.3	16.9
Lysine	22.9	22.4	23.0	23.2
Histidine	8.80	8.86	9.44	9.05
Arginine	26.0	23.8	26.0	25.0
Tryptophan	5.25	5.28	5.42	5.38

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	11	11	11	11
Sample Description	L04/E11/R1	L04/E11/R2	L04/E11/R3	L04/E11/R4
Covance LIMS #	10200175	10200380	10200129	10200326
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.89	2.01	1.91	2.09
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.770	0.831	0.797	0.863
18:1 Oleic	4.00	4.37	4.06	4.51
18:2 Linoleic	10.4	11.1	10.4	11.4
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.60	1.69	1.65	1.77
20:0 Arachidic	0.0567	0.0646	0.0585	0.0632
20:1 Eicosenoic	0.0340	0.0423	0.0331	0.0374
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0613	0.0669	0.0606	0.0681

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	11	11	11	11
Sample Description	L07/E11/R1	L07/E11/R2	L07/E11/R3	L07/E11/R4
Covance LIMS #	10200273	10200132	10200191	10200183
Proximate (%)				
Moisture	9.96	11.0	10.6	10.5
Protein	35.3	36.2	38.9	37.2
Total Fat	22.8	21.8	21.7	20.4
Ash	6.49	6.00	6.03	6.19
Carbohydrates	35.4	36.1	33.3	36.2
Acid Detergent Fiber (%)	17.5	16.0	15.7	16.2
Neutral Detergent Fiber (%)	17.3	17.3	16.8	16.9
Lectin (H.U./mg sample)*	14.9	15.7	19.0	28.5
Lectin (H.U./mg protein)*	46.8	48.9	54.7	85.6
Trypsin Inhibitor (TIU/mg)**	42.8	39.0	49.1	57.0
Phytic Acid (%)	1.72	1.83	1.70	1.75
Raffinose (%)	1.12	1.09	1.13	1.17
Stachyose (%)	4.34	4.18	4.38	4.29
Minerals (ppm)				
Calcium	2920	3160	2870	2980
Iron	83.4	83.7	80.9	83.6
Magnesium	2790	2940	2700	2730
Phosphorus	7630	7570	7150	7370
Potassium	20500	21100	20500	20800
Isoflavones (mcg/g)				
Daidzein	521	576	500	429
Glycitein	95.5	115	90.8	77.9
Genistein	441	503	455	355
Vitamins				
Beta Carotene (mg/100g)	0.0355	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.605	0.478	0.455	0.578
Riboflavin/Vitamin B2 (mg/100g)	0.515	0.465	0.364	0.355
Folic Acid/Vitamin B9 (mg/100g)	0.419	0.353	0.365	0.351
Phytonadione/Vitamin K1 (mcg/g)	0.378	0.622	0.515	0.466
Total Tocopherols (mg/100g)				
Alpha Tocopherol	6.23	4.39	5.31	6.02
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	19.2	17.3	18.6	19.2
Delta Tocopherol	3.68	4.06	3.80	3.58

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	11	11	11	11
Sample Description	L07/E11/R1	L07/E11/R2	L07/E11/R3	L07/E11/R4
Covance LIMS #	10200273	10200132	10200191	10200183
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	40.2	42.0	41.9	38.8
Threonine	14.8	15.2	15.3	14.6
Serine	18.1	18.8	19.0	16.9
Glutamic Acid	60.8	65.1	64.5	56.6
Proline	18.0	18.8	18.9	17.1
Glycine	15.2	15.7	16.1	15.1
Alanine	16.5	17.0	17.1	16.3
Cystine	6.32	6.69	6.35	5.85
Valine	16.5	17.8	17.7	17.3
Methionine	5.44	5.69	5.25	4.95
Isoleucine	16.8	17.6	17.9	17.2
Leucine	26.7	27.6	27.9	26.6
Tyrosine	13.8	14.5	14.5	13.9
Phenylalanine	17.8	18.2	18.5	17.7
Lysine	22.9	22.9	24.8	23.2
Histidine	9.26	9.79	10.2	9.88
Arginine	25.3	26.6	27.6	26.5
Tryptophan	5.44	5.72	5.27	4.88

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	11	11	11	11
Sample Description	L07/E11/R1	L07/E11/R2	L07/E11/R3	L07/E11/R4
Covance LIMS #	10200273	10200132	10200191	10200183
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.20	2.16	2.09	1.89
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	1.03	0.998	0.973	0.867
18:1 Oleic	5.80	5.39	5.20	4.95
18:2 Linoleic	11.3	10.6	10.4	9.52
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.45	1.42	1.35	1.23
20:0 Arachidic	0.0860	0.0816	0.0804	0.0723
20:1 Eicosenoic	0.0510	0.0461	0.0459	0.0436
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0791	0.0783	0.0766	0.0688

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	11	11	11	11
Sample Description	L08/E11/R1	L08/E11/R2	L08/E11/R3	L08/E11/R4
Covance LIMS #	10200109	10200280	10200239	10200240
Proximate (%)				
Moisture	13.3	13.5	13.6	13.3
Protein	38.6	38.7	35.4	35.6
Total Fat	19.0	21.0	21.2	20.9
Ash	4.94	5.14	5.03	5.02
Carbohydrates	37.4	35.1	38.4	38.5
Acid Detergent Fiber (%)	18.5	18.3	13.5	13.3
Neutral Detergent Fiber (%)	19.4	17.7	17.1	15.2
Lectin (H.U./mg sample)*	25.0	10.3	29.1	22.8
Lectin (H.U./mg protein)*	74.7	30.8	94.9	73.9
Trypsin Inhibitor (TIU/mg)**	27.7	35.8	28.7	27.9
Phytic Acid (%)	1.19	1.15	1.27	1.25
Raffinose (%)	1.00	1.01	0.975	0.973
Stachyose (%)	4.71	4.60	4.65	4.48
Minerals (ppm)				
Calcium	2350	2350	2370	2250
Iron	81.4	81.0	87.2	79.2
Magnesium	2450	2320	2400	2360
Phosphorus	5820	5730	5860	5640
Potassium	18300	17800	18100	17400
Isoflavones (mcg/g)				
Daidzein	975	1080	1020	1160
Glycitein	78.4	120	85.6	115
Genistein	1050	1050	1060	1110
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.340	0.397	0.356	0.313
Riboflavin/Vitamin B2 (mg/100g)	0.348	0.401	0.340	0.408
Folic Acid/Vitamin B9 (mg/100g)	0.299	0.287	0.285	0.277
Phytonadione/Vitamin K1 (mcg/g)	0.295	0.378	0.248	0.234
Total Tocopherols (mg/100g)				
Alpha Tocopherol	2.72	3.18	2.12	1.95
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	18.6	20.2	15.7	14.5
Delta Tocopherol	6.16	5.43	6.66	5.95

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	11	11	11	11
Sample Description	L08/E11/R1	L08/E11/R2	L08/E11/R3	L08/E11/R4
Covance LIMS #	10200109	10200280	10200239	10200240
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	44.4	42.1	44.6	43.6
Threonine	15.9	15.4	16.2	15.7
Serine	19.5	18.7	19.8	17.6
Glutamic Acid	68.1	65.8	69.3	66.8
Proline	19.4	19.1	19.2	19.3
Glycine	17.0	16.5	17.0	16.7
Alanine	17.4	17.3	17.7	17.6
Cystine	5.99	5.76	5.51	5.07
Valine	18.8	18.0	19.2	19.4
Methionine	5.14	5.06	5.59	6.01
Isoleucine	18.5	17.9	18.5	18.7
Leucine	29.5	28.1	29.6	29.6
Tyrosine	15.3	14.6	15.4	15.1
Phenylalanine	20.3	19.3	20.3	20.1
Lysine	24.8	24.6	24.1	24.9
Histidine	9.63	9.93	9.73	9.95
Arginine	29.4	28.1	29.4	29.2
Tryptophan	6.00	5.50	5.52	5.50

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	11	11	11	11
Sample Description	L08/E11/R1	L08/E11/R2	L08/E11/R3	L08/E11/R4
Covance LIMS #	10200109	10200280	10200239	10200240
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.82	1.94	2.05	2.03
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.938	0.976	1.08	1.05
18:1 Oleic	4.05	4.40	4.65	4.49
18:2 Linoleic	9.67	10.8	10.9	10.9
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.46	1.61	1.66	1.59
20:0 Arachidic	0.0693	0.0728	0.0797	0.0774
20:1 Eicosenoic	0.0330	0.0393	0.0370	0.0355
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0630	0.0658	0.0727	0.0705

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	11	11	11	11
Sample Description	L09/E11/R1	L09/E11/R2	L09/E11/R3	L09/E11/R4
Covance LIMS #	10200192	10200284	10200080	10200387
Proximate (%)				
Moisture	9.02	9.39	8.60	9.06
Protein	37.2	39.4	38.7	38.4
Total Fat	20.3	21.5	20.2	20.2
Ash	5.23	5.02	5.51	4.84
Carbohydrates	37.3	34.1	35.6	36.5
Acid Detergent Fiber (%)	15.5	12.1	10.6	13.0
Neutral Detergent Fiber (%)	16.2	15.9	13.9	15.4
Lectin (H.U./mg sample)*	27.0	16.3	31.1	9.71
Lectin (H.U./mg protein)*	80.0	45.8	87.7	27.8
Trypsin Inhibitor (TIU/mg)**	38.4	36.0	35.0	31.4
Phytic Acid (%)	1.28	1.10	1.19	1.28
Raffinose (%)	0.957	0.927	0.964	0.982
Stachyose (%)	4.46	4.55	4.63	4.64
Minerals (ppm)				
Calcium	2980	2910	3060	2910
Iron	70.5	70.2	75.4	71.1
Magnesium	2480	2460	2490	2430
Phosphorus	5640	5140	5660	5420
Potassium	17600	17100	17100	16900
Isoflavones (mcg/g)				
Daidzein	1190	1130	920	946
Glycitein	121	117	103	99.4
Genistein	1130	1060	892	994
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.253	0.363	0.298	0.435
Riboflavin/Vitamin B2 (mg/100g)	0.375	0.417	0.490	0.355
Folic Acid/Vitamin B9 (mg/100g)	0.402	0.455	0.498	0.442
Phytonadione/Vitamin K1 (mcg/g)	0.431	0.556	0.210	0.457
Total Tocopherols (mg/100g)				
Alpha Tocopherol	1.98	2.00	2.01	2.53
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	19.2	17.5	16.8	20.5
Delta Tocopherol	6.46	6.43	6.32	6.50

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	11	11	11	11
Sample Description	L09/E11/R1	L09/E11/R2	L09/E11/R3	L09/E11/R4
Covance LIMS #	10200192	10200284	10200080	10200387
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	42.3	43.2	43.7	42.7
Threonine	15.3	15.6	15.9	15.6
Serine	18.5	18.4	19.9	17.9
Glutamic Acid	62.7	65.4	68.2	64.1
Proline	17.5	19.3	19.6	19.0
Glycine	16.2	16.6	16.7	16.6
Alanine	17.4	17.2	17.4	17.0
Cystine	5.56	5.96	6.15	5.67
Valine	17.8	18.4	17.9	18.6
Methionine	4.99	5.15	5.38	5.50
Isoleucine	17.8	18.8	18.4	18.4
Leucine	28.2	29.0	29.1	28.6
Tyrosine	14.5	14.8	15.3	15.1
Phenylalanine	19.2	19.8	19.7	19.6
Lysine	25.1	23.9	25.5	23.0
Histidine	10.1	9.91	10.2	9.69
Arginine	27.7	28.1	28.8	27.9
Tryptophan	5.14	5.46	5.83	5.72

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	11	11	11	11
Sample Description	L09/E11/R1	L09/E11/R2	L09/E11/R3	L09/E11/R4
Covance LIMS #	10200192	10200284	10200080	10200387
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.84	2.15	1.95	2.03
16:1 Palmitoleic	< LOQ	0.0223	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.687	0.822	0.741	0.781
18:1 Oleic	3.69	4.41	4.03	4.10
18:2 Linoleic	9.88	11.3	10.2	10.7
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.40	1.56	1.46	1.53
20:0 Arachidic	0.0508	0.0615	0.0553	0.0620
20:1 Eicosenoic	0.0315	0.0390	0.0344	0.0385
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0557	0.0627	0.0575	0.0625

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	11	11	11	11
Sample Description	L10/E11/R1	L10/E11/R2	L10/E11/R3	L10/E11/R4
Covance LIMS #	10200375	10200257	10200292	10200381
Proximate (%)				
Moisture	8.46	8.17	8.64	8.22
Protein	40.4	39.7	40.8	37.7
Total Fat	20.5	21.2	20.7	20.5
Ash	4.14	4.27	4.19	4.50
Carbohydrates	35.0	34.7	34.3	37.4
Acid Detergent Fiber (%)	12.6	15.0	13.9	15.1
Neutral Detergent Fiber (%)	14.0	18.6	18.2	15.8
Lectin (H.U./mg sample)*	7.64	14.2	7.74	10.2
Lectin (H.U./mg protein)*	20.6	38.8	20.8	29.6
Trypsin Inhibitor (TIU/mg)**	40.4	23.6	37	26.8
Phytic Acid (%)	0.917	0.844	0.778	0.813
Raffinose (%)	1.18	1.10	1.04	1.00
Stachyose (%)	4.99	4.67	5.13	4.89
Minerals (ppm)				
Calcium	2450	2600	2520	2720
Iron	65.1	72.9	61.3	56.3
Magnesium	1960	1920	1890	2050
Phosphorus	4650	4450	4300	4380
Potassium	14300	13800	14600	16500
Isoflavones (mcg/g)				
Daidzein	695	703	703	837
Glycitein	94.2	82.9	87.1	84.4
Genistein	642	686	579	859
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.558	0.571	0.456	0.489
Riboflavin/Vitamin B2 (mg/100g)	0.461	0.438	0.447	0.386
Folic Acid/Vitamin B9 (mg/100g)	0.473	0.448	0.514	0.518
Phytonadione/Vitamin K1 (mcg/g)	0.629	0.472	0.378	0.562
Total Tocopherols (mg/100g)				
Alpha Tocopherol	2.77	2.31	2.43	2.64
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	22.5	21.0	21.6	23.6
Delta Tocopherol	6.19	6.49	6.03	6.84

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	11	11	11	11
Sample Description	L10/E11/R1	L10/E11/R2	L10/E11/R3	L10/E11/R4
Covance LIMS #	10200375	10200257	10200292	10200381
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	44.6	43.4	43.8	43.0
Threonine	16.4	15.7	15.5	15.9
Serine	19.1	19.4	18.4	18.6
Glutamic Acid	68.9	68.2	66.4	65.8
Proline	20.3	20.0	19.5	19.4
Glycine	17.2	17.0	17	16.7
Alanine	17.9	17.4	17.4	17.4
Cystine	6.19	5.39	5.59	6.09
Valine	19.7	18.8	19	18.7
Methionine	6.01	5.29	4.95	4.99
Isoleucine	19.4	18.9	19.5	18.6
Leucine	29.9	29.6	29.6	28.5
Tyrosine	15.6	15.2	15.1	15.1
Phenylalanine	20.2	19.7	20	19.3
Lysine	25.3	25.9	23.8	25.1
Histidine	10.6	9.99	10.1	9.97
Arginine	30.5	29.8	29.4	27.8
Tryptophan	5.96	5.96	5.77	5.72

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	11	11	11	11
Sample Description	L10/E11/R1	L10/E11/R2	L10/E11/R3	L10/E11/R4
Covance LIMS #	10200375	10200257	10200292	10200381
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.89	1.99	1.87	1.92
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.843	0.862	0.841	0.804
18:1 Oleic	4.46	4.68	4.48	4.30
18:2 Linoleic	10.6	11.0	10.4	10.8
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.39	1.47	1.41	1.48
20:0 Arachidic	0.0649	0.0660	0.0637	0.0636
20:1 Eicosenoic	0.0414	0.0404	0.0394	0.0421
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0666	0.0656	0.0622	0.0664

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	12	12	12	12
Sample Description	L01/E12/R1	L01/E12/R2	L01/E12/R3	L01/E12/R4
Covance LIMS #	10200282	10200077	10200059	10200135
Proximate (%)				
Moisture	8.37	7.10	7.68	7.97
Protein	37.7	36.8	37.5	34.4
Total Fat	20.3	19.2	18.3	18.1
Ash	5.18	5.63	5.22	5.49
Carbohydrates	36.9	38.4	39.0	41.9
Acid Detergent Fiber (%)	15.9	10.4	14.9	19.1
Neutral Detergent Fiber (%)	16.0	13.5	16.9	19.9
Lectin (H.U./mg sample)*	14.2	9.07	13.8	14.0
Lectin (H.U./mg protein)*	41.1	26.5	39.8	44.2
Trypsin Inhibitor (TIU/mg)**	40.9	27.9	30.4	28.6
Phytic Acid (%)	1.31	1.38	1.18	1.37
Raffinose (%)	0.821	0.760	0.811	0.827
Stachyose (%)	4.16	4.23	4.32	4.19
Minerals (ppm)				
Calcium	2760	2570	2610	2720
Iron	81.5	63.9	62.3	68.7
Magnesium	2340	2290	2340	2390
Phosphorus	5950	5910	5960	6020
Potassium	18200	17700	17800	18500
Isoflavones (mcg/g)				
Daidzein	939	778	848	983
Glycitein	195	173	180	265
Genistein	1040	897	974	1070
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.291	0.285	0.355	0.324
Riboflavin/Vitamin B2 (mg/100g)	0.406	0.443	0.324	0.429
Folic Acid/Vitamin B9 (mg/100g)	0.403	0.489	0.382	0.438
Phytonadione/Vitamin K1 (mcg/g)	0.347	0.170	0.182	0.348
Total Tocopherols (mg/100g)				
Alpha Tocopherol	1.38	1.23	1.41	1.25
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	15.9	16.5	16.5	15.6
Delta Tocopherol	8.86	9.11	9.02	9.08

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	12	12	12	12
Sample Description	L01/E12/R1	L01/E12/R2	L01/E12/R3	L01/E12/R4
Covance LIMS #	10200282	10200077	10200059	10200135
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	41.4	41.4	41.6	37.7
Threonine	14.6	14.9	14.9	13.3
Serine	18.1	18.9	17.2	15.3
Glutamic Acid	64.8	64.7	62.9	56.0
Proline	18.8	18.3	19.9	17.2
Glycine	15.6	15.7	15.9	14.8
Alanine	16.3	16.5	16.9	15.2
Cystine	5.61	5.45	5.31	5.11
Valine	17.9	16.9	18.4	16.6
Methionine	4.93	4.81	5.52	4.84
Isoleucine	17.8	17.3	18.1	16.6
Leucine	27.8	27.7	28.5	25.6
Tyrosine	14.2	14.2	14.7	13.4
Phenylalanine	18.7	18.4	19.5	17.1
Lysine	23.9	23.8	24.0	22.9
Histidine	9.79	9.66	10.1	9.03
Arginine	27.1	27.1	28.4	24.7
Tryptophan	5.19	5.65	5.51	5.05

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	12	12	12	12
Sample Description	L01/E12/R1	L01/E12/R2	L01/E12/R3	L01/E12/R4
Covance LIMS #	10200282	10200077	10200059	10200135
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.17	1.85	1.93	1.87
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	0.0232	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.773	0.686	0.707	0.679
18:1 Oleic	3.93	3.48	3.60	3.46
18:2 Linoleic	10.8	9.24	9.62	9.29
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.78	1.51	1.58	1.53
20:0 Arachidic	0.0597	0.0523	0.0541	0.0515
20:1 Eicosenoic	0.0333	0.0278	0.0278	0.0278
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0650	0.0568	0.0610	0.0557

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	12	12	12	12
Sample Description	L02/E12/R1	L02/E12/R2	L02/E12/R3	L02/E12/R4
Covance LIMS #	10200178	10200105	10200227	10200176
Proximate (%)				
Moisture	6.78	6.63	7.28	6.79
Protein	38.6	38.3	38.5	39.1
Total Fat	18.9	19.8	19.1	19.1
Ash	5.23	4.85	5.30	5.30
Carbohydrates	37.2	36.9	37.1	36.6
Acid Detergent Fiber (%)	13.4	15.1	16.6	14.4
Neutral Detergent Fiber (%)	14.7	15.7	17.7	14.7
Lectin (H.U./mg sample)*	30.3	30.3	29.4	22.9
Lectin (H.U./mg protein)*	84.0	84.7	82.5	62.8
Trypsin Inhibitor (TIU/mg)**	32.9	29.3	29.7	33.2
Phytic Acid (%)	1.09	1.12	1.03	1.00
Raffinose (%)	0.759	0.759	0.745	0.767
Stachyose (%)	4.27	4.39	4.34	4.28
Minerals (ppm)				
Calcium	2670	2610	2720	2650
Iron	73.7	71.2	73.9	70.9
Magnesium	2220	2250	2230	2190
Phosphorus	5100	5230	5050	4800
Potassium	18000	17700	18200	17900
Isoflavones (mcg/g)				
Daidzein	918	808	884	875
Glycitein	222	155	190	204
Genistein	854	794	856	805
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.386	0.336	0.416	0.371
Riboflavin/Vitamin B2 (mg/100g)	0.316	0.315	0.418	0.294
Folic Acid/Vitamin B9 (mg/100g)	0.462	0.483	0.404	0.472
Phytonadione/Vitamin K1 (mcg/g)	0.284	0.366	0.304	0.276
Total Tocopherols (mg/100g)				
Alpha Tocopherol	2.10	2.23	2.09	2.24
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	17.3	17.9	16.8	17.9
Delta Tocopherol	6.48	6.91	7.01	6.67

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	12	12	12	12
Sample Description	L02/E12/R1	L02/E12/R2	L02/E12/R3	L02/E12/R4
Covance LIMS #	10200178	10200105	10200227	10200176
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	43.8	43.6	41.2	44.6
Threonine	15.6	15.3	14.8	15.7
Serine	19.5	18.8	17.9	19.7
Glutamic Acid	69.2	67.8	62.8	70.5
Proline	19.7	19.7	18.8	20.4
Glycine	16.6	16.6	16.1	16.7
Alanine	17.2	16.9	16.2	17.3
Cystine	5.69	5.97	5.77	5.47
Valine	18.9	18.7	17.8	19.5
Methionine	5.16	5.26	4.94	5.27
Isoleucine	18.1	18.4	17.9	19.0
Leucine	29.2	28.9	27.9	29.9
Tyrosine	14.9	14.7	14.0	15.1
Phenylalanine	19.6	19.4	18.6	19.7
Lysine	25.3	25.6	25.0	26.1
Histidine	9.88	10.1	9.79	10.0
Arginine	28.7	28.6	27.3	29.4
Tryptophan	5.66	6.04	5.81	5.71

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	12	12	12	12
Sample Description	L02/E12/R1	L02/E12/R2	L02/E12/R3	L02/E12/R4
Covance LIMS #	10200178	10200105	10200227	10200176
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.96	2.02	1.97	1.82
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.836	0.880	0.842	0.776
18:1 Oleic	4.25	4.40	4.23	3.99
18:2 Linoleic	9.34	9.54	9.33	8.74
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.44	1.46	1.43	1.34
20:0 Arachidic	0.0634	0.0667	0.0627	0.0598
20:1 Eicosenoic	0.0306	0.0326	0.0317	0.0294
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0662	0.0654	0.0627	0.0579

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	12	12	12	12
Sample Description	L03/E12/R1	L03/E12/R2	L03/E12/R3	L03/E12/R4
Covance LIMS #	10200140	10200086	10200320	10200386
Proximate (%)				
Moisture	8.17	8.97	8.35	8.66
Protein	41.3	38.8	35.1	41.1
Total Fat	21.3	20.7	21.2	20.4
Ash	5.24	5.24	5.10	5.42
Carbohydrates	32.1	35.4	43.8	33.2
Acid Detergent Fiber (%)	13.1	17.6	15.2	12.7
Neutral Detergent Fiber (%)	14.5	18.1	16.0	14.1
Lectin (H.U./mg sample)*	16.3	29.6	19.1	8.99
Lectin (H.U./mg protein)*	43.1	83.7	59.2	24.0
Trypsin Inhibitor (TIU/mg)**	65.2	42.0	42.1	40.2
Phytic Acid (%)	1.51	1.30	1.31	1.63
Raffinose (%)	1.43	1.41	1.31	1.27
Stachyose (%)	3.15	3.94	3.75	3.62
Minerals (ppm)				
Calcium	3830	3650	3490	3420
Iron	72.7	64.0	65.7	74.6
Magnesium	2640	2490	2410	2430
Phosphorus	6410	6090	5990	6770
Potassium	15800	15500	15800	17600
Isoflavones (mcg/g)				
Daidzein	241	379	302	239
Glycitein	174	236	192	201
Genistein	212	412	379	234
Vitamins				
Beta Carotene (mg/100g)	0.104	0.0356	0.0480	0.0813
Thiamine HCl/Vitamin B1 (mg/100g)	0.567	0.510	0.447	0.544
Riboflavin/Vitamin B2 (mg/100g)	0.399	0.482	0.314	0.405
Folic Acid/Vitamin B9 (mg/100g)	0.680	0.524	0.514	0.559
Phytonadione/Vitamin K1 (mcg/g)	0.544	0.685	0.659	0.622
Total Tocopherols (mg/100g)				
Alpha Tocopherol	4.36	3.57	3.80	5.40
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	16.6	19.0	19.0	19.8
Delta Tocopherol	3.67	4.90	4.75	4.08

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	12	12	12	12
Sample Description	L03/E12/R1	L03/E12/R2	L03/E12/R3	L03/E12/R4
Covance LIMS #	10200140	10200086	10200320	10200386
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	47.9	44.5	47.8	46.5
Threonine	15.6	15.4	16.3	16.0
Serine	20.4	18.8	20.9	19.9
Glutamic Acid	74.3	67.8	74.8	72.4
Proline	21.2	19.6	21.4	21.2
Glycine	17.4	16.8	17.5	17.5
Alanine	17.9	16.6	18.4	17.6
Cystine	6.48	6.09	5.97	6.31
Valine	19.6	18.3	19.9	19.6
Methionine	5.46	5.51	5.66	5.69
Isoleucine	20.0	18.7	20.0	19.6
Leucine	31.0	29.6	31.4	30.4
Tyrosine	15.5	14.9	16.0	15.3
Phenylalanine	21.0	20.0	20.8	20.7
Lysine	25.8	25.3	25.8	25.9
Histidine	10.7	9.88	10.6	10.4
Arginine	31.7	29.2	31.8	30.5
Tryptophan	5.77	5.91	5.99	6.08

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	12	12	12	12
Sample Description	L03/E12/R1	L03/E12/R2	L03/E12/R3	L03/E12/R4
Covance LIMS #	10200140	10200086	10200320	10200386
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.95	1.99	2.21	2.09
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.783	0.706	0.805	0.862
18:1 Oleic	5.74	4.50	5.16	5.24
18:2 Linoleic	8.61	9.32	10.0	9.73
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.11	1.19	1.33	1.32
20:0 Arachidic	0.0671	0.0562	0.0654	0.0758
20:1 Eicosenoic	0.0429	0.0339	0.0434	0.0493
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0706	0.0632	0.0726	0.0789

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	12	12	12	12
Sample Description	L04/E12/R1	L04/E12/R2	L04/E12/R3	L04/E12/R4
Covance LIMS #	10200050	10200303	10200304	10200195
Proximate (%)				
Moisture	8.09	8.80	9.25	9.03
Protein	35.5	36.3	38.0	36.6
Total Fat	20.6	21.7	21.0	20.8
Ash	5.41	5.32	5.32	5.41
Carbohydrates	38.5	36.7	35.6	37.3
Acid Detergent Fiber (%)	14.7	15.8	17.0	13.1
Neutral Detergent Fiber (%)	19.1	15.8	17.0	14.2
Lectin (H.U./mg sample)*	14.3	19.2	16.0	30.9
Lectin (H.U./mg protein)*	43.7	58.0	46.3	92.8
Trypsin Inhibitor (TIU/mg)**	33.6	38.2	42.2	60.7
Phytic Acid (%)	1.56	1.40	1.33	1.48
Raffinose (%)	0.838	0.850	0.844	0.840
Stachyose (%)	4.49	4.46	4.50	4.28
Minerals (ppm)				
Calcium	3200	2990	3010	3030
Iron	67.9	68.4	66.7	70.0
Magnesium	2520	2410	2370	2450
Phosphorus	6550	6380	6330	6360
Potassium	18100	17800	17500	17700
Isoflavones (mcg/g)				
Daidzein	604	588	505	693
Glycitein	222	217	148	220
Genistein	641	657	618	727
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.447	0.471	0.385	0.369
Riboflavin/Vitamin B2 (mg/100g)	0.306	0.333	0.320	0.339
Folic Acid/Vitamin B9 (mg/100g)	0.304	0.325	0.311	0.373
Phytonadione/Vitamin K1 (mcg/g)	0.291	0.453	0.398	0.384
Total Tocopherols (mg/100g)				
Alpha Tocopherol	2.03	1.82	1.91	1.78
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	19.5	18.9	18.6	18.2
Delta Tocopherol	7.78	7.60	7.56	7.60

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	12	12	12	12
Sample Description	L04/E12/R1	L04/E12/R2	L04/E12/R3	L04/E12/R4
Covance LIMS #	10200050	10200303	10200304	10200195
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	39.1	41.3	43.1	41.8
Threonine	14.3	14.8	15.2	14.9
Serine	17.3	18.3	19.1	18.5
Glutamic Acid	59.2	64.0	66.2	63.0
Proline	18.2	19.2	20.3	17.6
Glycine	14.9	15.8	16.4	15.7
Alanine	15.8	16.6	16.7	16.3
Cystine	5.53	5.70	5.56	5.80
Valine	16.6	18.1	18.4	17.3
Methionine	5.42	5.12	5.51	5.57
Isoleucine	16.5	17.7	17.9	17.0
Leucine	26.3	27.7	28.4	27.9
Tyrosine	13.8	14.4	14.8	14.1
Phenylalanine	17.5	18.3	19.2	18.6
Lysine	23.8	24.1	25.5	25.6
Histidine	9.17	9.68	9.92	9.75
Arginine	25.7	27.3	27.9	26.7
Tryptophan	5.33	5.47	5.53	5.29

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	12	12	12	12
Sample Description	L04/E12/R1	L04/E12/R2	L04/E12/R3	L04/E12/R4
Covance LIMS #	10200050	10200303	10200304	10200195
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.11	2.20	2.15	1.95
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.831	0.880	0.837	0.753
18:1 Oleic	4.50	4.85	4.94	4.22
18:2 Linoleic	10.4	10.8	10.7	9.59
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.60	1.64	1.60	1.42
20:0 Arachidic	0.0646	0.0675	0.0642	0.0582
20:1 Eicosenoic	0.0387	0.0390	0.0366	0.0332
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0692	0.0704	0.0687	0.0655

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	12	12	12	12
Sample Description	L07/E12/R1	L07/E12/R2	L07/E12/R3	L07/E12/R4
Covance LIMS #	10200277	10200323	10200199	10200332
Proximate (%)				
Moisture	11.0	8.09	8.08	9.10
Protein	37.2	44.4	33.1	34.2
Total Fat	22.5	23.9	23.4	21.8
Ash	6.39	6.48	6.31	6.09
Carbohydrates	33.9	25.2	37.2	38.0
Acid Detergent Fiber (%)	17.3	17.4	15.3	16.6
Neutral Detergent Fiber (%)	17.5	18.5	17.5	17.6
Lectin (H.U./mg sample)*	13.4	19.0	34.7	19.1
Lectin (H.U./mg protein)*	40.4	46.7	114	61.5
Trypsin Inhibitor (TIU/mg)**	44.4	39.5	39.5	43.9
Phytic Acid (%)	1.62	2.07	1.91	1.91
Raffinose (%)	1.02	1.07	1.09	1.18
Stachyose (%)	4.22	3.68	3.60	4.13
Minerals (ppm)				
Calcium	3260	3620	3520	3140
Iron	70.1	101	86.7	75.4
Magnesium	2810	2930	2850	2630
Phosphorus	7570	8570	8190	7680
Potassium	20400	20900	20300	20100
Isoflavones (mcg/g)				
Daidzein	336	256	321	232
Glycitein	203	222	225	166
Genistein	294	231	259	298
Vitamins				
Beta Carotene (mg/100g)	0.0251	0.0295	0.0260	0.0276
Thiamine HCl/Vitamin B1 (mg/100g)	0.422	0.929	0.779	0.608
Riboflavin/Vitamin B2 (mg/100g)	0.460	0.411	0.382	0.422
Folic Acid/Vitamin B9 (mg/100g)	0.380	0.342	0.369	0.375
Phytonadione/Vitamin K1 (mcg/g)	0.407	0.494	0.451	0.530
Total Tocopherols (mg/100g)				
Alpha Tocopherol	6.26	6.79	5.79	6.80
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	18.4	22.1	19.1	20.9
Delta Tocopherol	3.20	4.27	3.60	3.43

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	12	12	12	12
Sample Description	L07/E12/R1	L07/E12/R2	L07/E12/R3	L07/E12/R4
Covance LIMS #	10200277	10200323	10200199	10200332
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	42.4	36.3	35.5	38.0
Threonine	15.1	13.6	13.2	14.0
Serine	19.0	16.3	15.8	16.9
Glutamic Acid	66.1	54.0	51.7	57.2
Proline	18.8	16.0	16.0	17.2
Glycine	16.0	14.3	14.3	15.1
Alanine	16.7	15.2	15.0	15.5
Cystine	6.10	5.58	5.05	5.62
Valine	17.2	16.0	15.6	16.8
Methionine	5.28	4.96	4.22	5.04
Isoleucine	17.6	15.4	15.6	16.3
Leucine	28.2	24.3	24.0	25.3
Tyrosine	14.5	12.8	12.3	13.4
Phenylalanine	18.9	15.9	16.1	16.9
Lysine	23.0	20.0	21.6	21.9
Histidine	9.30	9.03	9.02	9.14
Arginine	27.1	23.2	23.1	24.1
Tryptophan	5.30	5.80	5.33	5.54

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	12	12	12	12
Sample Description	L07/E12/R1	L07/E12/R2	L07/E12/R3	L07/E12/R4
Covance LIMS #	10200277	10200323	10200199	10200332
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.34	2.38	2.23	2.26
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	1.02	1.09	1.01	0.977
18:1 Oleic	5.54	6.09	5.69	5.45
18:2 Linoleic	11.2	10.7	10.2	10.4
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.42	1.44	1.33	1.33
20:0 Arachidic	0.0869	0.0937	0.0856	0.0850
20:1 Eicosenoic	0.0510	0.0537	0.0483	0.0516
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0862	0.0944	0.0863	0.0851

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	12	12	12	12
Sample Description	L08/E12/R1	L08/E12/R2	L08/E12/R3	L08/E12/R4
Covance LIMS #	10200130	10200062	10200355	10200083
Proximate (%)				
Moisture	12.4	11.2	12.0	11.6
Protein	39.2	36.4	39.4	39.7
Total Fat	20.1	19.4	19.8	19.3
Ash	5.41	5.42	5.15	5.31
Carbohydrates	35.4	38.9	35.7	35.6
Acid Detergent Fiber (%)	16.6	13.6	15.8	12.1
Neutral Detergent Fiber (%)	17.0	16.7	17.2	14.6
Lectin (H.U./mg sample)*	12.8	13.5	11.6	24.3
Lectin (H.U./mg protein)*	37.3	41.9	33.4	69.3
Trypsin Inhibitor (TIU/mg)**	23.9	31.0	26.6	27.8
Phytic Acid (%)	1.45	1.16	1.32	1.27
Raffinose (%)	0.949	0.881	0.784	0.777
Stachyose (%)	4.34	4.41	4.32	4.38
Minerals (ppm)				
Calcium	2880	2520	2640	2660
Iron	88.4	79.7	79.4	83.1
Magnesium	2590	2420	2520	2530
Phosphorus	6770	5890	6260	6070
Potassium	18600	17600	17600	17600
Isoflavones (mcg/g)				
Daidzein	537	707	631	647
Glycitein	205	188	188	181
Genistein	535	704	670	671
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.369	0.329	0.345	0.294
Riboflavin/Vitamin B2 (mg/100g)	0.424	0.403	0.326	0.276
Folic Acid/Vitamin B9 (mg/100g)	0.288	0.304	0.303	0.336
Phytonadione/Vitamin K1 (mcg/g)	0.349	0.182	0.185	0.117
Total Tocopherols (mg/100g)				
Alpha Tocopherol	3.60	2.77	3.02	2.57
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	16.4	17.1	18.0	16.1
Delta Tocopherol	5.50	5.80	5.93	6.14

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	12	12	12	12
Sample Description	L08/E12/R1	L08/E12/R2	L08/E12/R3	L08/E12/R4
Covance LIMS #	10200130	10200062	10200355	10200083
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	44.3	42.0	43.9	44.3
Threonine	15.5	15.3	16.0	15.7
Serine	19.2	18.4	19.1	19.8
Glutamic Acid	70.2	65.2	68.8	70.1
Proline	20.7	20.2	20.0	19.7
Glycine	16.9	16.4	17.3	17.1
Alanine	17.6	17.2	17.2	17.5
Cystine	5.47	5.14	5.82	5.38
Valine	19.4	18.2	19.0	18.6
Methionine	5.34	5.48	5.49	5.08
Isoleucine	19.2	17.8	18.8	18.8
Leucine	29.7	28.4	29.3	29.4
Tyrosine	15.2	14.8	15.0	15.0
Phenylalanine	19.9	19.5	19.8	19.8
Lysine	24.8	24.2	24.8	25.2
Histidine	9.60	9.90	10.1	10.4
Arginine	29.5	28.6	30.0	29.8
Tryptophan	5.78	6.06	5.49	5.90

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	12	12	12	12
Sample Description	L08/E12/R1	L08/E12/R2	L08/E12/R3	L08/E12/R4
Covance LIMS #	10200130	10200062	10200355	10200083
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.96	1.95	1.91	1.74
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	1.02	0.954	0.945	0.837
18:1 Oleic	4.62	4.30	4.23	3.81
18:2 Linoleic	9.83	9.74	9.51	8.63
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.53	1.41	1.42	1.28
20:0 Arachidic	0.0797	0.0732	0.0722	0.0637
20:1 Eicosenoic	0.0357	0.0325	0.0327	0.0294
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0779	0.0717	0.0707	0.0618

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	12	12	12	12
Sample Description	L09/E12/R1	L09/E12/R2	L09/E12/R3	L09/E12/R4
Covance LIMS #	10200055	10200168	10200134	10200084
Proximate (%)				
Moisture	7.99	9.06	9.04	8.64
Protein	37.9	39.1	38.0	38.6
Total Fat	20.8	20.1	20.4	20.2
Ash	5.02	5.30	5.29	5.63
Carbohydrates	36.3	35.4	36.3	35.5
Acid Detergent Fiber (%)	14.1	13.6	15.2	12.6
Neutral Detergent Fiber (%)	17.2	15.7	16.2	13.1
Lectin (H.U./mg sample)*	12.9	9.05	38.6	34.2
Lectin (H.U./mg protein)*	37.1	25.4	111	96.8
Trypsin Inhibitor (TIU/mg)**	29.0	40.4	32.7	33.4
Phytic Acid (%)	1.23	1.37	1.28	1.28
Raffinose (%)	0.879	0.875	0.880	0.868
Stachyose (%)	4.38	4.33	4.22	4.43
Minerals (ppm)				
Calcium	3130	3110	3240	3170
Iron	74.4	69.9	72.4	75.5
Magnesium	2550	2350	2560	2520
Phosphorus	6060	5630	5710	5910
Potassium	17300	17500	16900	17400
Isoflavones (mcg/g)				
Daidzein	516	676	594	595
Glycitein	161	179	184	186
Genistein	543	682	626	601
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.403	0.357	0.370	0.393
Riboflavin/Vitamin B2 (mg/100g)	0.445	0.323	0.438	0.477
Folic Acid/Vitamin B9 (mg/100g)	0.420	0.442	0.433	0.440
Phytonadione/Vitamin K1 (mcg/g)	0.251	0.483	0.535	0.170
Total Tocopherols (mg/100g)				
Alpha Tocopherol	2.88	2.41	2.07	2.43
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	17.4	19.0	16.9	17.3
Delta Tocopherol	5.61	5.83	6.13	6.07

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	12	12	12	12
Sample Description	L09/E12/R1	L09/E12/R2	L09/E12/R3	L09/E12/R4
Covance LIMS #	10200055	10200168	10200134	10200084
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	42.4	44.8	44.1	43.7
Threonine	15.2	15.6	15.3	15.7
Serine	18.6	19.5	19.3	19.5
Glutamic Acid	65.1	69.2	68.4	68.2
Proline	20.3	19.8	19.9	20.1
Glycine	16.4	16.9	16.5	16.7
Alanine	17.2	17.3	16.9	17.2
Cystine	5.46	5.23	5.87	6.01
Valine	18.3	19.1	18.6	18.5
Methionine	5.31	5.38	5.78	5.55
Isoleucine	18.0	18.8	18.4	19.0
Leucine	28.6	29.8	29.4	29.7
Tyrosine	14.9	15.3	14.7	15.2
Phenylalanine	19.6	20.0	19.9	19.7
Lysine	25.5	26.2	25.4	25.0
Histidine	9.92	10.2	10.2	10.4
Arginine	28.5	29.1	28.6	29.3
Tryptophan	5.70	5.61	5.83	5.71

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	12	12	12	12
Sample Description	L09/E12/R1	L09/E12/R2	L09/E12/R3	L09/E12/R4
Covance LIMS #	10200055	10200168	10200134	10200084
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.20	2.20	2.21	2.21
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.821	0.791	0.823	0.808
18:1 Oleic	4.80	4.44	4.45	4.47
18:2 Linoleic	10.2	10.2	10.3	10.3
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.38	1.41	1.47	1.44
20:0 Arachidic	0.0653	0.0622	0.0639	0.0630
20:1 Eicosenoic	0.0377	0.0360	0.0367	0.0378
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0714	0.0684	0.0672	0.0662

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	12	12	12	12
Sample Description	L10/E12/R1	L10/E12/R2	L10/E12/R3	L10/E12/R4
Covance LIMS #	10200203	10200171	10200182	10200353
Proximate (%)				
Moisture	8.72	7.58	8.33	8.65
Protein	38.1	38.1	38.5	37.0
Total Fat	20.9	20.8	20.3	21.1
Ash	4.43	4.63	4.77	4.29
Carbohydrates	36.5	36.5	36.4	37.5
Acid Detergent Fiber (%)	14.5	16.0	15.4	19.7
Neutral Detergent Fiber (%)	15.6	19.3	16.5	18.6
Lectin (H.U./mg sample)*	23.1	9.84	35.0	17.6
Lectin (H.U./mg protein)*	66.4	27.9	99.2	52.1
Trypsin Inhibitor (TIU/mg)**	35.7	38.2	42.0	29.7
Phytic Acid (%)	0.816	0.857	0.902	0.887
Raffinose (%)	0.860	0.939	0.917	0.858
Stachyose (%)	4.46	4.64	4.58	4.40
Minerals (ppm)				
Calcium	2930	2850	3020	3080
Iron	61.5	61.7	59.3	66.2
Magnesium	2050	2020	2050	2120
Phosphorus	4330	4610	4640	4610
Potassium	15100	14700	15400	15700
Isoflavones (mcg/g)				
Daidzein	613	516	502	476
Glycitein	202	203	194	199
Genistein	574	479	482	506
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.551	0.532	0.564	0.494
Riboflavin/Vitamin B2 (mg/100g)	0.341	0.346	0.317	0.339
Folic Acid/Vitamin B9 (mg/100g)	0.425	0.401	0.401	0.380
Phytonadione/Vitamin K1 (mcg/g)	0.382	0.485	0.528	0.536
Total Tocopherols (mg/100g)				
Alpha Tocopherol	2.04	2.13	2.49	2.81
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	19.4	17.7	20.5	22.9
Delta Tocopherol	6.57	5.02	5.91	6.41

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	12	12	12	12
Sample Description	L10/E12/R1	L10/E12/R2	L10/E12/R3	L10/E12/R4
Covance LIMS #	10200203	10200171	10200182	10200353
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	42.8	41.4	40.8	42.5
Threonine	15.1	14.9	14.9	15.2
Serine	18.0	17.6	17.8	18.6
Glutamic Acid	64.6	62.4	61.4	65.8
Proline	19.6	19.2	17.6	19.0
Glycine	16.5	16.2	15.9	16.4
Alanine	16.9	16.9	16.1	16.7
Cystine	5.08	5.01	5.19	6.12
Valine	18.4	18.2	17.7	18.4
Methionine	5.34	5.27	4.76	5.08
Isoleucine	18.5	17.9	17.9	18.4
Leucine	28.9	28.2	27.8	28.2
Tyrosine	14.9	14.4	14.2	14.6
Phenylalanine	19.6	19.2	18.7	19.2
Lysine	24.8	25.5	25.2	24.7
Histidine	10.2	10.1	10.1	9.69
Arginine	28.2	27.8	27.6	27.3
Tryptophan	5.48	5.53	5.39	6.08

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	12	12	12	12
Sample Description	L10/E12/R1	L10/E12/R2	L10/E12/R3	L10/E12/R4
Covance LIMS #	10200203	10200171	10200182	10200353
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.98	1.94	1.94	2.00
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.801	0.863	0.820	0.804
18:1 Oleic	4.56	4.78	4.71	4.51
18:2 Linoleic	10.1	9.84	9.97	10.2
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.38	1.31	1.30	1.41
20:0 Arachidic	0.0611	0.0678	0.0640	0.0636
20:1 Eicosenoic	0.0357	0.0383	0.0377	0.0407
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0681	0.0726	0.0692	0.0705

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	13	13	13	13
Sample Description	L01/E13/R1	L01/E13/R2	L01/E13/R3	L01/E13/R4
Covance LIMS #	10200057	10200206	10200362	10200085
Proximate (%)				
Moisture	7.39	8.56	8.39	7.81
Protein	37.6	38.6	38.1	37.2
Total Fat	17.0	17.6	18.9	17.2
Ash	5.15	5.21	4.85	5.27
Carbohydrates	40.3	38.6	38.2	40.2
Acid Detergent Fiber (%)	15.1	13.6	13.9	12.5
Neutral Detergent Fiber (%)	16.4	14.7	16.3	14.9
Lectin (H.U./mg sample)*	12.3	7.22	11.2	36.9
Lectin (H.U./mg protein)*	35.4	20.5	32.2	107
Trypsin Inhibitor (TIU/mg)**	26.5	34.2	29.4	21.4
Phytic Acid (%)	1.18	1.31	1.26	1.39
Raffinose (%)	0.816	0.927	0.868	0.885
Stachyose (%)	4.89	4.42	4.57	4.89
Minerals (ppm)				
Calcium	2610	2670	2810	2630
Iron	66.1	60.0	63.5	60.3
Magnesium	2190	2270	2290	2250
Phosphorus	5810	5830	5580	6320
Potassium	17200	17600	17200	18000
Isoflavones (mcg/g)				
Daidzein	599	875	756	680
Glycitein	108	145	115	105
Genistein	641	907	898	733
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.412	0.390	0.413	0.318
Riboflavin/Vitamin B2 (mg/100g)	0.415	0.404	0.361	0.508
Folic Acid/Vitamin B9 (mg/100g)	0.396	0.445	0.431	0.553
Phytonadione/Vitamin K1 (mcg/g)	0.222	0.229	0.238	0.145
Total Tocopherols (mg/100g)				
Alpha Tocopherol	1.16	1.27	1.40	1.32
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	16.1	16.5	18.3	15.7
Delta Tocopherol	9.41	10.1	10.3	10.2

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	13	13	13	13
Sample Description	L01/E13/R1	L01/E13/R2	L01/E13/R3	L01/E13/R4
Covance LIMS #	10200057	10200206	10200362	10200085
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	40.9	43.7	43.8	43.4
Threonine	14.8	15.3	15.7	15.5
Serine	16.8	18.8	18.7	19.3
Glutamic Acid	62.3	67.5	67.9	68.0
Proline	20.0	19.6	19.0	19.3
Glycine	16.1	16.6	17.0	16.6
Alanine	17.2	17.2	17.4	17.4
Cystine	4.79	4.95	5.72	5.54
Valine	18.4	18.8	19.0	18.2
Methionine	5.05	5.18	5.41	5.07
Isoleucine	17.9	18.7	18.9	18.3
Leucine	28.4	29.3	29.3	28.9
Tyrosine	14.8	14.8	14.8	15.0
Phenylalanine	19.7	19.9	19.8	19.4
Lysine	25.4	23.0	22.4	25.2
Histidine	10.1	9.91	9.81	10.3
Arginine	28.3	28.9	28.9	28.9
Tryptophan	5.46	5.21	5.86	5.58

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	13	13	13	13
Sample Description	L01/E13/R1	L01/E13/R2	L01/E13/R3	L01/E13/R4
Covance LIMS #	10200057	10200206	10200362	10200085
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.60	1.64	1.80	1.49
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.663	0.633	0.680	0.593
18:1 Oleic	3.53	3.41	3.73	3.19
18:2 Linoleic	8.77	9.00	10.0	8.17
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.52	1.55	1.71	1.42
20:0 Arachidic	0.0536	0.0519	0.0549	0.0486
20:1 Eicosenoic	0.0290	0.0292	0.0326	0.0278
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0540	0.0526	0.0553	0.0482

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	13	13	13	13
Sample Description	L02/E13/R1	L02/E13/R2	L02/E13/R3	L02/E13/R4
Covance LIMS #	10200187	10200161	10200159	10200162
Proximate (%)				
Moisture	7.28	6.84	7.04	6.93
Protein	38.6	38.3	38.4	38.7
Total Fat	19.3	19.0	18.6	19.1
Ash	5.17	5.10	5.03	4.96
Carbohydrates	36.9	37.6	38.0	37.3
Acid Detergent Fiber (%)	15.0	16.2	14.6	16.2
Neutral Detergent Fiber (%)	15.9	16.0	15.9	16.0
Lectin (H.U./mg sample)*	22.1	10.5	12.0	13.6
Lectin (H.U./mg protein)*	61.8	29.3	33.8	37.9
Trypsin Inhibitor (TIU/mg)**	46.6	31.9	29.2	29.1
Phytic Acid (%)	1.06	1.20	1.17	1.09
Raffinose (%)	0.821	0.835	0.813	0.846
Stachyose (%)	4.68	4.55	4.32	4.52
Minerals (ppm)				
Calcium	2670	2530	2580	2590
Iron	65.5	68.1	63.9	65.2
Magnesium	2150	2250	2230	2200
Phosphorus	4950	5500	5250	4960
Potassium	17600	17600	17500	17300
Isoflavones (mcg/g)				
Daidzein	870	904	848	823
Glycitein	115	155	105	105
Genistein	857	810	885	819
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.480	0.452	0.471	0.491
Riboflavin/Vitamin B2 (mg/100g)	0.307	0.347	0.340	0.330
Folic Acid/Vitamin B9 (mg/100g)	0.510	0.564	0.568	0.553
Phytonadione/Vitamin K1 (mcg/g)	0.294	0.416	0.355	0.393
Total Tocopherols (mg/100g)				
Alpha Tocopherol	2.11	2.14	1.93	2.01
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	17.7	17.1	16.9	17.2
Delta Tocopherol	8.46	8.16	8.55	8.50

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	13	13	13	13
Sample Description	L02/E13/R1	L02/E13/R2	L02/E13/R3	L02/E13/R4
Covance LIMS #	10200187	10200161	10200159	10200162
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	43.9	43.0	43.9	45.2
Threonine	15.9	15.2	15.5	16.0
Serine	19.6	19.0	19.0	20.2
Glutamic Acid	68.7	66.8	68.8	71.6
Proline	20.1	19.3	20.0	20.4
Glycine	16.5	16.9	16.6	17.5
Alanine	17.8	17.0	17.0	17.6
Cystine	5.86	5.78	5.97	6.08
Valine	18.7	18.4	18.9	19.1
Methionine	5.41	5.12	5.86	5.78
Isoleucine	18.7	18.0	18.5	18.7
Leucine	30.0	28.6	29.3	29.9
Tyrosine	15.1	14.7	15.0	15.3
Phenylalanine	19.8	19.2	19.7	20.2
Lysine	26.4	25.2	24.8	26.1
Histidine	10.3	9.78	9.85	10.1
Arginine	29.1	28.2	28.9	29.9
Tryptophan	5.41	5.65	5.52	5.60

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	13	13	13	13
Sample Description	L02/E13/R1	L02/E13/R2	L02/E13/R3	L02/E13/R4
Covance LIMS #	10200187	10200161	10200159	10200162
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.61	1.74	1.72	1.75
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.742	0.892	0.821	0.848
18:1 Oleic	4.13	4.74	4.51	4.66
18:2 Linoleic	8.79	9.13	9.07	9.39
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.34	1.41	1.45	1.46
20:0 Arachidic	0.0595	0.0718	0.0653	0.0684
20:1 Eicosenoic	0.0319	0.0355	0.0336	0.0361
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0541	0.0637	0.0601	0.0630

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	13	13	13	13
Sample Description	L03/E13/R1	L03/E13/R2	L03/E13/R3	L03/E13/R4
Covance LIMS #	10200250	10200297	10200188	10200205
Proximate (%)				
Moisture	8.28	8.11	8.30	8.47
Protein	38.7	39.2	39.0	38.9
Total Fat	20.8	19.8	21.2	21.2
Ash	4.74	4.83	5.18	5.19
Carbohydrates	35.8	36.2	34.7	34.7
Acid Detergent Fiber (%)	16.4	16.0	15.6	14.1
Neutral Detergent Fiber (%)	19.1	18.1	17.3	15.2
Lectin (H.U./mg sample)*	10.4	4.56	15.7	24.5
Lectin (H.U./mg protein)*	29.2	12.6	43.8	68.7
Trypsin Inhibitor (TIU/mg)**	34.5	41.1	52.0	34.2
Phytic Acid (%)	1.21	1.34	1.45	1.43
Raffinose (%)	1.44	1.58	1.56	1.38
Stachyose (%)	4.19	3.55	3.54	3.90
Minerals (ppm)				
Calcium	3300	3300	3400	3530
Iron	61.5	65.7	62.8	62.4
Magnesium	2270	2290	2310	2320
Phosphorus	6160	6050	6380	6260
Potassium	15500	15200	16700	16700
Isoflavones (mcg/g)				
Daidzein	530	357	483	548
Glycitein	202	148	155	145
Genistein	506	332	429	509
Vitamins				
Beta Carotene (mg/100g)	0.0338	0.0501	0.0617	0.0395
Thiamine HCl/Vitamin B1 (mg/100g)	0.522	0.547	0.554	0.496
Riboflavin/Vitamin B2 (mg/100g)	0.491	0.356	0.423	0.391
Folic Acid/Vitamin B9 (mg/100g)	0.418	0.415	0.616	0.528
Phytonadione/Vitamin K1 (mcg/g)	0.428	0.262	0.445	0.328
Total Tocopherols (mg/100g)				
Alpha Tocopherol	4.06	5.41	5.78	4.64
Beta Tocopherol	< LOQ	0.665	0.595	0.547
Gamma Tocopherol	16.8	18.6	18.9	19.6
Delta Tocopherol	6.52	6.50	6.04	6.71

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	13	13	13	13
Sample Description	L03/E13/R1	L03/E13/R2	L03/E13/R3	L03/E13/R4
Covance LIMS #	10200250	10200297	10200188	10200205
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	43.6	42.9	42.3	42.9
Threonine	15.3	14.6	15.0	15.2
Serine	19.5	18.5	18.9	17.8
Glutamic Acid	68.5	65.3	65.8	64.6
Proline	20.0	19.5	19.6	20.0
Glycine	16.5	16.5	15.8	16.5
Alanine	17.2	17.2	17.0	17.2
Cystine	5.89	5.46	5.88	5.77
Valine	18.4	18.4	17.7	18.7
Methionine	5.52	5.20	5.09	5.89
Isoleucine	18.5	18.4	18.0	19.0
Leucine	29.2	28.3	28.4	29.3
Tyrosine	14.9	13.9	14.2	14.7
Phenylalanine	19.7	18.8	19.1	19.7
Lysine	25.1	24.7	24.8	25.0
Histidine	9.99	9.63	10.0	10.3
Arginine	29.1	27.8	28.7	29.1
Tryptophan	5.45	5.20	5.22	5.17

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	13	13	13	13
Sample Description	L03/E13/R1	L03/E13/R2	L03/E13/R3	L03/E13/R4
Covance LIMS #	10200250	10200297	10200188	10200205
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.85	1.69	1.82	1.80
16:1 Palmitoleic	0.0218	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.773	0.751	0.814	0.736
18:1 Oleic	5.97	6.66	6.30	5.59
18:2 Linoleic	9.78	8.50	9.44	9.65
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.29	1.11	1.24	1.23
20:0 Arachidic	0.0695	0.0702	0.0745	0.0664
20:1 Eicosenoic	0.0516	0.0517	0.0530	0.0498
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0673	0.0692	0.0720	0.0644

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	13	13	13	13
Sample Description	L04/E13/R1	L04/E13/R2	L04/E13/R3	L04/E13/R4
Covance LIMS #	10200231	10200101	10200214	10200322
Proximate (%)				
Moisture	9.62	8.91	8.53	8.27
Protein	38.9	37.7	38.9	36.1
Total Fat	20.5	19.1	18.9	20.7
Ash	4.95	5.02	5.00	4.85
Carbohydrates	35.6	38.2	37.2	38.4
Acid Detergent Fiber (%)	15.3	14.6	15.7	17.1
Neutral Detergent Fiber (%)	17.8	19.3	17.5	17.7
Lectin (H.U./mg sample)*	32.9	22.0	28.1	11.8
Lectin (H.U./mg protein)*	93.4	64.0	78.9	35.5
Trypsin Inhibitor (TIU/mg)**	43.3	32.5	36.6	29.4
Phytic Acid (%)	1.43	1.31	1.16	1.30
Raffinose (%)	0.876	0.889	0.925	0.969
Stachyose (%)	4.97	4.78	4.71	4.82
Minerals (ppm)				
Calcium	3030	2920	2860	2870
Iron	57.8	58.3	57.3	60.7
Magnesium	2280	2350	2180	2190
Phosphorus	6320	6470	5900	5930
Potassium	17000	17000	15700	16000
Isoflavones (mcg/g)				
Daidzein	664	646	600	634
Glycitein	135	138	129	159
Genistein	630	637	584	620
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.430	0.491	0.464	0.468
Riboflavin/Vitamin B2 (mg/100g)	0.454	0.355	0.352	0.341
Folic Acid/Vitamin B9 (mg/100g)	0.433	0.542	0.427	0.425
Phytonadione/Vitamin K1 (mcg/g)	0.377	0.438	0.316	0.401
Total Tocopherols (mg/100g)				
Alpha Tocopherol	1.89	1.94	1.98	2.04
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	17.7	19.0	17.8	19.2
Delta Tocopherol	9.65	9.61	8.77	9.15

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	13	13	13	13
Sample Description	L04/E13/R1	L04/E13/R2	L04/E13/R3	L04/E13/R4
Covance LIMS #	10200231	10200101	10200214	10200322
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	44.0	42.9	43.9	43.3
Threonine	15.3	15.0	15.9	15.7
Serine	18.0	18.3	19.5	19.3
Glutamic Acid	66.6	66.1	68.4	67.3
Proline	18.9	18.7	19.2	19.3
Glycine	16.6	16.5	16.7	16.5
Alanine	17.1	16.7	17.3	17.2
Cystine	5.13	6.30	5.74	5.73
Valine	19.6	18.3	18.7	18.3
Methionine	5.59	4.81	5.46	5.47
Isoleucine	19.0	18.2	18.8	18.1
Leucine	29.1	28.4	29.4	28.6
Tyrosine	14.7	14.5	14.6	14.8
Phenylalanine	19.7	19.2	19.8	18.8
Lysine	24.7	23.9	24.5	23.4
Histidine	9.86	9.45	10.1	9.70
Arginine	28.0	27.6	29.1	28.0
Tryptophan	5.38	5.61	5.77	5.39

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	13	13	13	13
Sample Description	L04/E13/R1	L04/E13/R2	L04/E13/R3	L04/E13/R4
Covance LIMS #	10200231	10200101	10200214	10200322
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.81	1.70	1.69	1.83
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.803	0.764	0.757	0.793
18:1 Oleic	5.09	4.79	4.72	4.91
18:2 Linoleic	10.0	9.20	9.23	10.1
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.50	1.39	1.36	1.50
20:0 Arachidic	0.0668	0.0632	0.0629	0.0651
20:1 Eicosenoic	0.0417	0.0345	0.0394	0.0400
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0676	0.0620	0.0599	0.0655

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	13	13	13	13
Sample Description	L07/E13/R1	L07/E13/R2	L07/E13/R3	L07/E13/R4
Covance LIMS #	10200305	10200165	10200075	10200234
Proximate (%)				
Moisture	7.40	6.97	7.89	9.32
Protein	33.3	31.5	32.0	37.6
Total Fat	23.2	24.9	23.3	22.9
Ash	6.14	6.17	6.21	5.88
Carbohydrates	37.4	37.4	38.4	33.6
Acid Detergent Fiber (%)	17.7	18.0	12.2	16.9
Neutral Detergent Fiber (%)	19.5	20.1	15.2	20.4
Lectin (H.U./mg sample)*	13.4	7.49	8.19	61.3
Lectin (H.U./mg protein)*	43.5	25.6	27.8	180
Trypsin Inhibitor (TIU/mg)**	49.9	49.0	63.1	38.6
Phytic Acid (%)	1.83	2.21	2.01	1.86
Raffinose (%)	1.17	1.13	1.22	1.25
Stachyose (%)	4.01	4.04	4.02	4.48
Minerals (ppm)				
Calcium	3420	3530	3550	3290
Iron	80.7	95.5	79.3	80.8
Magnesium	2750	2890	2650	2580
Phosphorus	8090	8380	7880	7710
Potassium	19900	20000	20700	20300
Isoflavones (mcg/g)				
Daidzein	229	371	388	428
Glycitein	98.8	132	125	152
Genistein	165	261	335	313
Vitamins				
Beta Carotene (mg/100g)	0.0380	0.0353	0.0258	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	1.02	0.914	0.694	0.656
Riboflavin/Vitamin B2 (mg/100g)	0.387	0.412	0.532	0.452
Folic Acid/Vitamin B9 (mg/100g)	0.309	0.342	0.466	0.360
Phytonadione/Vitamin K1 (mcg/g)	0.471	0.553	0.379	0.457
Total Tocopherols (mg/100g)				
Alpha Tocopherol	7.56	7.41	6.54	6.94
Beta Tocopherol	0.553	0.613	< LOQ	0.556
Gamma Tocopherol	20.2	22.9	20.3	19.5
Delta Tocopherol	4.16	4.87	4.78	4.83

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	13	13	13	13
Sample Description	L07/E13/R1	L07/E13/R2	L07/E13/R3	L07/E13/R4
Covance LIMS #	10200305	10200165	10200075	10200234
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	37.5	34.8	35.1	39.1
Threonine	13.9	12.9	13.0	14.3
Serine	17.0	15.5	15.7	17.3
Glutamic Acid	56.6	50.5	52.8	59.4
Proline	17.1	15.4	15.5	16.8
Glycine	14.6	13.9	14.0	14.9
Alanine	15.7	14.7	14.9	15.7
Cystine	5.57	5.75	5.67	6.07
Valine	16.5	15.3	15.1	17.1
Methionine	5.02	4.35	4.70	5.39
Isoleucine	16.0	14.9	15.2	16.5
Leucine	25.1	23.3	23.5	25.7
Tyrosine	13.0	12.3	12.4	13.3
Phenylalanine	16.5	15.5	15.6	17.2
Lysine	21.8	21.1	21.3	22.2
Histidine	9.17	8.77	8.71	9.33
Arginine	24.6	21.9	22.5	24.5
Tryptophan	5.52	5.22	5.02	5.22

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	13	13	13	13
Sample Description	L07/E13/R1	L07/E13/R2	L07/E13/R3	L07/E13/R4
Covance LIMS #	10200305	10200165	10200075	10200234
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	2.01	2.29	1.97	2.08
16:1 Palmitoleic	0.0241	0.0261	< LOQ	0.0227
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	1.11	1.07	0.953	0.979
18:1 Oleic	7.33	7.38	5.81	6.27
18:2 Linoleic	10.0	11.4	9.93	10.6
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.25	1.48	1.28	1.35
20:0 Arachidic	0.108	0.104	0.0924	0.0946
20:1 Eicosenoic	0.0629	0.0672	0.0545	0.0590
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0945	0.0971	0.0829	0.0840

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	13	13	13	13
Sample Description	L08/E13/R1	L08/E13/R2	L08/E13/R3	L08/E13/R4
Covance LIMS #	10200194	10200363	10200070	10200301
Proximate (%)				
Moisture	11.5	11.8	11.2	12.0
Protein	38.5	38.4	38.4	38.6
Total Fat	20.5	20.6	20.7	20.0
Ash	4.99	4.77	5.43	4.98
Carbohydrates	36.0	36.2	35.5	36.4
Acid Detergent Fiber (%)	13.6	9.93	9.75	12.2
Neutral Detergent Fiber (%)	15.5	15.5	12.5	15.9
Lectin (H.U./mg sample)*	17.3	9.81	6.36	4.19
Lectin (H.U./mg protein)*	50.7	28.9	18.7	12.4
Trypsin Inhibitor (TIU/mg)**	30.6	28.3	29.3	29.5
Phytic Acid (%)	1.31	1.30	1.32	1.41
Raffinose (%)	0.915	0.986	0.950	0.793
Stachyose (%)	4.38	4.59	4.59	4.45
Minerals (ppm)				
Calcium	2440	2490	2430	2470
Iron	68.8	77.8	74.1	72.8
Magnesium	2240	2220	2230	2350
Phosphorus	5840	5770	5660	6010
Potassium	17100	16700	16300	17200
Isoflavones (mcg/g)				
Daidzein	793	603	691	841
Glycitein	122	117	111	111
Genistein	784	649	695	923
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.351	0.393	0.321	0.331
Riboflavin/Vitamin B2 (mg/100g)	0.322	0.349	0.399	0.289
Folic Acid/Vitamin B9 (mg/100g)	0.321	0.280	0.374	0.275
Phytonadione/Vitamin K1 (mcg/g)	0.232	0.181	0.242	0.176
Total Tocopherols (mg/100g)				
Alpha Tocopherol	3.15	3.65	2.77	2.73
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	17.7	18.5	16.7	22.7
Delta Tocopherol	7.31	7.44	7.41	8.16

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	13	13	13	13
Sample Description	L08/E13/R1	L08/E13/R2	L08/E13/R3	L08/E13/R4
Covance LIMS #	10200194	10200363	10200070	10200301
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	42.6	43.2	43.4	40.9
Threonine	15.6	15.8	15.7	14.7
Serine	18.5	18.1	19.7	17.2
Glutamic Acid	64.7	67.5	68.7	62.4
Proline	17.9	19.7	19.8	18.6
Glycine	16.5	17.1	16.8	16.1
Alanine	17.6	17.3	17.3	16.9
Cystine	5.40	5.39	5.56	4.81
Valine	18.5	18.9	18.0	18.1
Methionine	5.10	5.39	5.18	5.02
Isoleucine	18.4	19.0	18.0	17.8
Leucine	29.0	29.0	28.8	27.7
Tyrosine	14.8	14.9	14.9	13.8
Phenylalanine	19.7	19.6	19.5	18.4
Lysine	24.7	24.4	24.8	23.2
Histidine	10.2	9.94	10.2	8.91
Arginine	29.5	29.1	29.1	26.5
Tryptophan	5.24	5.73	5.45	5.34

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	13	13	13	13
Sample Description	L08/E13/R1	L08/E13/R2	L08/E13/R3	L08/E13/R4
Covance LIMS #	10200194	10200363	10200070	10200301
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.82	1.81	1.70	1.81
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	1.01	1.06	0.992	0.993
18:1 Oleic	4.90	5.08	4.86	4.88
18:2 Linoleic	10.1	10.0	9.43	9.98
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.44	1.50	1.34	1.44
20:0 Arachidic	0.0844	0.0896	0.0833	0.0806
20:1 Eicosenoic	0.0397	0.0415	0.0390	0.0368
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0744	0.0746	0.0708	0.0676

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	13	13	13	13
Sample Description	L09/E13/R1	L09/E13/R2	L09/E13/R3	L09/E13/R4
Covance LIMS #	10200346	10200373	10200087	10200164
Proximate (%)				
Moisture	9.22	9.04	8.90	8.36
Protein	37.8	38.0	37.8	37.4
Total Fat	20.4	20.3	19.2	20.0
Ash	5.17	4.86	4.97	5.00
Carbohydrates	36.7	36.7	38.1	37.6
Acid Detergent Fiber (%)	14.0	13.2	16.4	15.1
Neutral Detergent Fiber (%)	17.1	14.5	19.2	16.7
Lectin (H.U./mg sample)*	9.64	11.8	17.9	7.02
Lectin (H.U./mg protein)*	28.1	34.0	52.0	20.4
Trypsin Inhibitor (TIU/mg)**	32.2	28.0	28.8	31.2
Phytic Acid (%)	1.31	1.29	1.31	1.37
Raffinose (%)	0.923	0.953	0.966	1.05
Stachyose (%)	4.62	4.67	4.64	4.64
Minerals (ppm)				
Calcium	3150	3100	3160	3140
Iron	62.6	64.2	66.3	69.0
Magnesium	2350	2360	2410	2340
Phosphorus	5880	5630	6210	5990
Potassium	16400	16300	17100	16700
Isoflavones (mcg/g)				
Daidzein	875	781	808	622
Glycitein	174	137	231	124
Genistein	844	751	595	588
Vitamins				
Beta Carotene (mg/100g)	< LOQ	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.463	0.474	0.422	0.457
Riboflavin/Vitamin B2 (mg/100g)	0.350	0.384	0.467	0.360
Folic Acid/Vitamin B9 (mg/100g)	0.434	0.430	0.593	0.474
Phytonadione/Vitamin K1 (mcg/g)	0.263	0.401	0.427	0.578
Total Tocopherols (mg/100g)				
Alpha Tocopherol	2.68	2.79	2.60	3.15
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	18.2	19.7	16.6	19.5
Delta Tocopherol	7.74	8.73	8.25	7.93

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	13	13	13	13
Sample Description	L09/E13/R1	L09/E13/R2	L09/E13/R3	L09/E13/R4
Covance LIMS #	10200346	10200373	10200087	10200164
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	43.4	42.8	43.4	43.5
Threonine	15.5	15.4	15.4	15.4
Serine	18.8	18.0	18.3	19.5
Glutamic Acid	67.4	64.9	64.9	67.9
Proline	19.4	19.8	19.2	18.9
Glycine	16.7	16.3	16.4	16.8
Alanine	16.9	16.9	16.8	17.1
Cystine	5.46	5.38	5.70	6.01
Valine	19.2	18.5	18.2	18.2
Methionine	5.52	5.44	5.20	5.18
Isoleucine	18.5	18.1	17.9	17.8
Leucine	29.0	28.6	28.5	28.3
Tyrosine	15.0	14.7	14.7	14.7
Phenylalanine	19.8	19.5	19.6	19.2
Lysine	24.1	24.4	25.4	24.3
Histidine	9.97	9.77	9.86	9.62
Arginine	28.4	28.3	28.3	28.0
Tryptophan	5.41	5.46	5.66	5.18

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	13	13	13	13
Sample Description	L09/E13/R1	L09/E13/R2	L09/E13/R3	L09/E13/R4
Covance LIMS #	10200346	10200373	10200087	10200164
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.86	1.88	1.65	1.82
16:1 Palmitoleic	0.0226	0.0228	< LOQ	0.0223
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.734	0.759	0.711	0.764
18:1 Oleic	5.06	5.08	4.83	5.24
18:2 Linoleic	9.83	10.2	8.47	9.56
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.39	1.46	1.26	1.41
20:0 Arachidic	0.0616	0.0641	0.0598	0.0655
20:1 Eicosenoic	0.0415	0.0424	0.0339	0.0421
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0609	0.0615	0.0572	0.0653

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	13	13	13	13
Sample Description	L10/E13/R1	L10/E13/R2	L10/E13/R3	L10/E13/R4
Covance LIMS #	10200128	10200067	10200278	10200263
Proximate (%)				
Moisture	8.16	7.45	8.20	7.78
Protein	38.1	38.8	38.6	38.5
Total Fat	19.2	19.6	21.6	20.3
Ash	4.39	4.29	4.43	4.84
Carbohydrates	38.3	37.4	35.4	36.4
Acid Detergent Fiber (%)	18.9	14.9	17.3	16.0
Neutral Detergent Fiber (%)	19.7	16.7	17.0	19.8
Lectin (H.U./mg sample)*	13.1	21.6	14.5	14.9
Lectin (H.U./mg protein)*	37.3	60.2	41.0	41.9
Trypsin Inhibitor (TIU/mg)**	24.7	25.6	32.0	26.4
Phytic Acid (%)	0.866	0.894	0.875	0.875
Raffinose (%)	1.06	0.977	1.01	0.992
Stachyose (%)	5.01	4.89	4.85	4.81
Minerals (ppm)				
Calcium	2680	2710	2950	2840
Iron	57.1	70.6	54.9	72.4
Magnesium	1990	1870	1870	2000
Phosphorus	4570	4460	4630	5060
Potassium	14800	13800	14400	15800
Isoflavones (mcg/g)				
Daidzein	637	524	552	331
Glycitein	151	104	123	76.9
Genistein	573	492	502	398
Vitamins				
Beta Carotene (mg/100g)	0.0421	< LOQ	< LOQ	< LOQ
Thiamine HCl/Vitamin B1 (mg/100g)	0.609	0.594	0.635	0.567
Riboflavin/Vitamin B2 (mg/100g)	0.438	0.387	0.434	0.419
Folic Acid/Vitamin B9 (mg/100g)	0.523	0.531	0.463	0.401
Phytonadione/Vitamin K1 (mcg/g)	0.605	0.443	0.458	0.565
Total Tocopherols (mg/100g)				
Alpha Tocopherol	2.23	2.49	2.53	2.80
Beta Tocopherol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocopherol	18.1	19.4	19.3	19.2
Delta Tocopherol	7.20	7.34	6.96	6.30

*H.U. - Hemagglutinating Unit
** TIU - Trypsin Inhibitor Units
LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	13	13	13	13
Sample Description	L10/E13/R1	L10/E13/R2	L10/E13/R3	L10/E13/R4
Covance LIMS #	10200128	10200067	10200278	10200263
Total Tocotrienols (mg/100g)				
Alpha Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Beta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Gamma Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Delta Tocotrienol	< LOQ	< LOQ	< LOQ	< LOQ
Amino Acids (mg/g)				
Aspartic Acid	43.4	42.9	40.7	43.7
Threonine	15.6	15.7	14.8	15.6
Serine	19.5	18.5	17.9	19.6
Glutamic Acid	69.1	65.7	62.1	68.2
Proline	20.3	20.9	18.3	18.9
Glycine	16.4	16.7	16.1	16.5
Alanine	17.1	17.5	16.7	17.2
Cystine	5.68	5.12	5.40	5.48
Valine	18.8	18.8	17.6	18.0
Methionine	5.64	5.41	5.37	5.30
Isoleucine	18.6	18.5	17.6	18.3
Leucine	29.2	29.1	27.6	29.1
Tyrosine	15.0	15.3	14.1	15.0
Phenylalanine	19.5	20.1	19.1	19.6
Lysine	24.4	26.0	23.2	24.6
Histidine	10.1	10.3	9.50	10.2
Arginine	29.2	29.6	27.1	28.4
Tryptophan	5.67	5.77	5.38	5.38

LOQ - Limit of Quantitation

Table 2
Compositional Analyses of Seed-Dry Weight

Entry Number	13	13	13	13
Sample Description	L10/E13/R1	L10/E13/R2	L10/E13/R3	L10/E13/R4
Covance LIMS #	10200128	10200067	10200278	10200263
Fatty Acids (%)				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	1.61	1.67	1.86	1.77
16:1 Palmitoleic	< LOQ	0.0218	0.0230	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	0.756	0.784	0.826	0.853
18:1 Oleic	4.69	4.91	5.27	5.05
18:2 Linoleic	9.45	9.78	11.1	10.3
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	1.25	1.27	1.46	1.40
20:0 Arachidic	0.0638	0.0669	0.0718	0.0751
20:1 Eicosenoic	0.0388	0.0410	0.0500	0.0461
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.0608	0.0657	0.0691	0.0685

LOQ - Limit of Quantitation

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	1	1	1	1
Sample Description	L01/E01/R1	L01/E01/R2	L01/E01/R3	L01/E01/R4
Covance LIMS #	10200336	10200271	10200262	10200152
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.2	9.96	9.87	10.0
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	0.118	< LOQ	0.121
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.27	4.10	4.16	4.10
18:1 Oleic	21.9	20.7	21.6	20.1
18:2 Linoleic	54.2	55.6	54.9	55.9
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	8.64	8.74	8.62	8.99
20:0 Arachidic	0.327	0.314	0.316	0.305
20:1 Eicosenoic	0.156	0.152	0.151	0.148
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.342	0.338	0.343	0.348

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	1	1	1	1
Sample Description	L02/E01/R1	L02/E01/R2	L02/E01/R3	L02/E01/R4
Covance LIMS #	10200368	10200076	10200108	10200307
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	9.82	10.0	10.0	9.87
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.63	4.55	4.60	4.52
18:1 Oleic	23.1	22.4	22.5	22.6
18:2 Linoleic	54.1	54.3	54.2	54.3
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	7.48	7.84	7.78	7.81
20:0 Arachidic	0.345	0.341	0.338	0.334
20:1 Eicosenoic	0.165	0.164	0.166	0.161
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.336	0.341	0.345	0.323

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	1	1	1	1
Sample Description	L03/E01/R1	L03/E01/R2	L03/E01/R3	L03/E01/R4
Covance LIMS #	10200308	10200113	10200291	10200115
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	9.94	10.0	10.1	10.2
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.01	4.14	4.26	4.21
18:1 Oleic	25.6	26.2	25.8	25.3
18:2 Linoleic	53.1	52.4	52.3	52.7
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	6.46	6.37	6.61	6.69
20:0 Arachidic	0.325	0.328	0.339	0.340
20:1 Eicosenoic	0.194	0.204	0.203	0.204
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.337	0.354	0.354	0.357

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	1	1	1	1
Sample Description	L04/E01/R1	L04/E01/R2	L04/E01/R3	L04/E01/R4
Covance LIMS #	10200210	10200117	10200144	10200138
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	9.76	9.97	9.83	9.88
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.37	4.27	4.41	4.24
18:1 Oleic	22.4	21.9	23.7	21.8
18:2 Linoleic	54.7	54.7	53.5	55.0
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	7.98	8.28	7.69	8.20
20:0 Arachidic	0.329	0.324	0.332	0.319
20:1 Eicosenoic	0.176	0.187	0.169	0.175
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.351	0.347	0.347	0.338

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	1	1	1	1
Sample Description	L07/E01/R1	L07/E01/R2	L07/E01/R3	L07/E01/R4
Covance LIMS #	10200148	10200133	10200317	10200382
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.5	10.3	10.4	10.5
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	5.07	5.07	5.05	4.94
18:1 Oleic	25.7	26.3	25.9	24.4
18:2 Linoleic	51.1	50.7	50.8	52.2
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	6.59	6.57	6.73	6.86
20:0 Arachidic	0.425	0.431	0.421	0.433
20:1 Eicosenoic	0.218	0.218	0.213	0.240
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.407	0.410	0.405	0.430

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	1	1	1	1
Sample Description	L08/E01/R1	L08/E01/R2	L08/E01/R3	L08/E01/R4
Covance LIMS #	10200321	10200289	10200151	10200081
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.0	10.1	10.0	9.97
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	5.40	5.26	5.12	5.25
18:1 Oleic	22.5	22.0	21.8	22.0
18:2 Linoleic	53.2	53.8	54.1	54.2
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	7.92	7.84	8.05	7.57
20:0 Arachidic	0.405	0.401	0.383	0.390
20:1 Eicosenoic	0.171	0.180	0.159	0.167
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.386	0.373	0.377	0.372

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	1	1	1	1
Sample Description	L09/E01/R1	L09/E01/R2	L09/E01/R3	L09/E01/R4
Covance LIMS #	10200270	10200365	10200302	10200328
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.1	10.1	10.1	10.2
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.13	4.30	4.28	4.14
18:1 Oleic	21.1	22.7	22.4	21.2
18:2 Linoleic	56.3	55.1	55.3	56.2
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	7.51	6.97	7.08	7.43
20:0 Arachidic	0.312	0.326	0.322	0.314
20:1 Eicosenoic	0.173	0.178	0.178	0.178
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.330	0.340	0.332	0.334

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	1	1	1	1
Sample Description	L10/E01/R1	L10/E01/R2	L10/E01/R3	L10/E01/R4
Covance LIMS #	10200383	10200258	10200221	10200185
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	9.66	9.61	9.71	9.62
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.30	4.40	4.35	4.25
18:1 Oleic	22.5	23.2	22.8	22.2
18:2 Linoleic	55.4	54.8	55.0	55.7
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	7.19	7.14	7.34	7.30
20:0 Arachidic	0.333	0.332	0.314	0.320
20:1 Eicosenoic	0.208	0.184	0.179	0.182
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.361	0.347	0.340	0.366

Pages 372 to 387 of the Covance report contained data not relevant to the assessment of the nutritional composition of SYHT0H2 soybean and were removed.

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	6	6	6	6
Sample Description	L01/E06/R1	L01/E06/R2	L01/E06/R3	L01/E06/R4
Covance LIMS #	10200347	10200065	10200089	10200174
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.7	10.4	10.6	10.5
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	0.122	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.34	4.36	4.20	4.27
18:1 Oleic	22.5	22.9	21.5	21.8
18:2 Linoleic	52.8	52.8	54.2	53.6
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	8.81	8.62	8.65	9.03
20:0 Arachidic	0.340	0.339	0.320	0.335
20:1 Eicosenoic	0.159	0.156	0.159	0.150
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.360	0.365	0.345	0.357

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	6	6	6	6
Sample Description	L02/E06/R1	L02/E06/R2	L02/E06/R3	L02/E06/R4
Covance LIMS #	10200139	10200094	10200343	10200189
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.4	10.7	10.5	10.5
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.84	4.82	4.82	4.78
18:1 Oleic	23.9	23.6	23.2	23.3
18:2 Linoleic	52.5	52.5	52.7	52.7
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	7.45	7.55	7.76	7.76
20:0 Arachidic	0.364	0.363	0.366	0.362
20:1 Eicosenoic	0.168	0.150	0.172	0.173
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.348	0.353	0.362	0.350

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	6	6	6	6
Sample Description	L03/E06/R1	L03/E06/R2	L03/E06/R3	L03/E06/R4
Covance LIMS #	10200049	10200045	10200166	10200111
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.9	10.8	10.7	10.7
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.21	4.16	4.08	4.26
18:1 Oleic	26.3	25.0	26.3	26.4
18:2 Linoleic	51.3	52.5	51.5	51.2
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	6.43	6.57	6.49	6.48
20:0 Arachidic	0.345	0.332	0.330	0.342
20:1 Eicosenoic	0.209	0.204	0.196	0.203
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.369	0.356	0.372	0.374

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	6	6	6	6
Sample Description	L04/E06/R1	L04/E06/R2	L04/E06/R3	L04/E06/R4
Covance LIMS #	10200247	10200370	10200283	10200377
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.4	10.2	10.3	10.4
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	0.0990	0.105	< LOQ	0.107
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.32	4.45	4.59	4.46
18:1 Oleic	22.0	24.4	24.8	24.1
18:2 Linoleic	53.9	52.3	51.7	52.4
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	8.36	7.61	7.68	7.63
20:0 Arachidic	0.338	0.347	0.356	0.359
20:1 Eicosenoic	0.189	0.182	0.184	0.194
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.350	0.358	0.359	0.374

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	6	6	6	6
Sample Description	L07/E06/R1	L07/E06/R2	L07/E06/R3	L07/E06/R4
Covance LIMS #	10200327	10200091	10200078	10200266
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	11.0	10.7	10.8	10.7
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.92	5.31	5.10	5.14
18:1 Oleic	25.9	29.5	26.2	29.0
18:2 Linoleic	50.7	47.5	50.0	47.9
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	6.53	5.88	6.75	6.15
20:0 Arachidic	0.417	0.451	0.430	0.454
20:1 Eicosenoic	0.221	0.234	0.223	0.230
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.397	0.429	0.406	0.431

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	6	6	6	6
Sample Description	L08/E06/R1	L08/E06/R2	L08/E06/R3	L08/E06/R4
Covance LIMS #	10200198	10200319	10200208	10200364
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.5	10.5	10.4	10.5
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	5.55	5.62	5.34	5.25
18:1 Oleic	23.0	23.2	23.3	22.9
18:2 Linoleic	52.3	52.0	52.4	52.9
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	7.68	7.69	7.64	7.51
20:0 Arachidic	0.430	0.424	0.403	0.404
20:1 Eicosenoic	0.170	0.160	0.155	0.165
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.399	0.413	0.377	0.374

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	6	6	6	6
Sample Description	L09/E06/R1	L09/E06/R2	L09/E06/R3	L09/E06/R4
Covance LIMS #	10200265	10200313	10200274	10200190
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.5	10.9	10.6	10.7
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.34	4.40	4.27	4.37
18:1 Oleic	25.2	24.1	22.7	23.5
18:2 Linoleic	52.2	52.6	54.4	53.3
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	6.85	7.06	7.19	7.21
20:0 Arachidic	0.343	0.342	0.332	0.341
20:1 Eicosenoic	0.182	0.180	0.178	0.178
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.356	0.370	0.346	0.368

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	6	6	6
Sample Description	L10/E06/R1	L10/E06/R3	L10/E06/R4
Covance LIMS #	10200039	10200056	10200330
Fatty Acids % of Total			
8:0 Caprylic	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.2	10.2	10.2
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.63	4.91	4.62
18:1 Oleic	24.2	25.0	23.7
18:2 Linoleic	53.1	52.2	53.4
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ
18:3 Linolenic	7.02	6.86	7.17
20:0 Arachidic	0.363	0.377	0.357
20:1 Eicosenoic	0.187	0.183	0.190
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.365	0.385	0.362

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	7	7	7	7
Sample Description	L01/E07/R1	L01/E07/R2	L01/E07/R3	L01/E07/R4
Covance LIMS #	10200295	10200116	10200154	10200137
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.5	10.6	10.3	10.5
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	0.116	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.14	4.32	4.22	4.54
18:1 Oleic	21.0	24.2	23.6	23.3
18:2 Linoleic	54.5	51.5	52.4	52.2
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	8.93	8.46	8.64	8.58
20:0 Arachidic	0.313	0.342	0.327	0.356
20:1 Eicosenoic	0.148	0.159	0.153	0.163
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.336	0.360	0.357	0.363

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	7	7	7	7
Sample Description	L02/E07/R1	L02/E07/R2	L02/E07/R3	L02/E07/R4
Covance LIMS #	10200287	10200310	10200220	10200246
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.5	10.5	10.6	10.6
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	0.118	< LOQ	< LOQ	0.113
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.87	4.74	4.78	4.85
18:1 Oleic	23.6	23.6	23.4	23.4
18:2 Linoleic	52.3	52.7	52.6	52.4
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	7.77	7.63	7.77	7.81
20:0 Arachidic	0.373	0.354	0.356	0.368
20:1 Eicosenoic	0.173	0.168	0.158	0.175
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.353	0.343	0.338	0.354

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	7	7	7	7
Sample Description	L03/E07/R1	L03/E07/R2	L03/E07/R3	L03/E07/R4
Covance LIMS #	10200219	10200243	10200209	10200177
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.5	10.5	10.5	10.6
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.53	4.56	4.56	4.26
18:1 Oleic	29.8	29.4	29.0	29.1
18:2 Linoleic	48.1	48.1	48.4	48.6
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	6.12	6.45	6.63	6.42
20:0 Arachidic	0.374	0.390	0.390	0.359
20:1 Eicosenoic	0.203	0.214	0.211	0.208
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.381	0.390	0.391	0.411

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	7	7	7	7
Sample Description	L04/E07/R1	L04/E07/R2	L04/E07/R3	L04/E07/R4
Covance LIMS #	10200378	10200357	10200071	10200276
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.4	10.4	10.3	10.3
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	0.106
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.41	4.57	4.57	4.57
18:1 Oleic	22.8	23.7	25.2	24.1
18:2 Linoleic	53.2	52.5	51.4	52.3
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	8.19	7.99	7.68	7.75
20:0 Arachidic	0.359	0.351	0.352	0.354
20:1 Eicosenoic	0.214	0.179	0.173	0.175
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.378	0.362	0.358	0.359

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	7	7	7	7
Sample Description	L07/E07/R1	L07/E07/R2	L07/E07/R3	L07/E07/R4
Covance LIMS #	10200229	10200156	10200096	10200122
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	11.2	10.8	11.2	11.0
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	5.18	5.13	5.19	4.95
18:1 Oleic	26.6	28.0	25.7	26.4
18:2 Linoleic	49.5	48.4	50.1	49.8
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	6.46	6.56	6.76	6.73
20:0 Arachidic	0.443	0.433	0.449	0.428
20:1 Eicosenoic	0.219	0.214	0.194	0.207
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.427	0.423	0.426	0.413

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	7	7	7	7
Sample Description	L08/E07/R1	L08/E07/R2	L08/E07/R3	L08/E07/R4
Covance LIMS #	10200054	10200340	10200090	10200254
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.6	10.7	10.7	10.8
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	0.115	< LOQ	< LOQ	0.120
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	5.39	5.32	5.32	5.17
18:1 Oleic	22.3	22.2	22.4	22.0
18:2 Linoleic	52.7	52.9	52.9	53.3
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	7.82	7.87	7.69	7.65
20:0 Arachidic	0.421	0.413	0.410	0.399
20:1 Eicosenoic	0.171	0.177	0.151	0.175
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.400	0.383	0.387	0.371

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	7	7	7	7
Sample Description	L09/E07/R1	L09/E07/R2	L09/E07/R3	L09/E07/R4
Covance LIMS #	10200253	10200046	10200114	10200242
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.7	10.9	10.8	10.6
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.37	4.40	4.46	4.33
18:1 Oleic	24.9	24.4	23.8	22.9
18:2 Linoleic	52.0	52.6	52.7	53.9
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	7.13	6.89	7.26	7.39
20:0 Arachidic	0.342	0.342	0.346	0.341
20:1 Eicosenoic	0.188	0.186	0.185	0.179
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.360	0.355	0.360	0.350

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	7	7	7	7
Sample Description	L10/E07/R1	L10/E07/R2	L10/E07/R3	L10/E07/R4
Covance LIMS #	10200217	10200038	10200238	10200092
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.0	10.2	10.0	10.3
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.84	4.73	4.54	4.61
18:1 Oleic	24.8	24.2	23.7	23.2
18:2 Linoleic	52.4	52.7	53.7	53.7
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	7.02	7.25	7.12	7.28
20:0 Arachidic	0.368	0.368	0.350	0.356
20:1 Eicosenoic	0.180	0.178	0.187	0.166
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.355	0.359	0.360	0.366

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	8	8	8	8
Sample Description	L01/E08/R1	L01/E08/R2	L01/E08/R3	L01/E08/R4
Covance LIMS #	10200361	10200367	10200228	10200385
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.8	10.9	10.9	10.9
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.05	4.06	4.11	4.06
18:1 Oleic	22.7	21.6	22.5	21.6
18:2 Linoleic	53.6	54.4	53.4	54.5
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	8.06	8.20	8.25	8.08
20:0 Arachidic	0.315	0.322	0.323	0.332
20:1 Eicosenoic	0.166	0.163	0.170	0.175
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.326	0.327	0.338	0.354

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	8	8	8	8
Sample Description	L02/E08/R1	L02/E08/R2	L02/E08/R3	L02/E08/R4
Covance LIMS #	10200193	10200329	10200104	10200052
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.9	10.8	11.0	10.9
16:1 Palmitoleic	< LOQ	0.120	0.117	0.121
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.87	5.09	4.90	4.88
18:1 Oleic	24.4	25.4	24.4	25.1
18:2 Linoleic	51.8	50.5	51.4	51.0
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	7.15	7.17	7.23	7.14
20:0 Arachidic	0.371	0.389	0.376	0.374
20:1 Eicosenoic	0.171	0.178	0.174	0.175
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.365	0.358	0.355	0.355

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	8	8	8	8
Sample Description	L03/E08/R1	L03/E08/R2	L03/E08/R3	L03/E08/R4
Covance LIMS #	10200232	10200088	10200384	10200180
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.7	11.5	10.9	11.2
16:1 Palmitoleic	0.108	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.43	4.26	4.55	4.19
18:1 Oleic	29.1	25.6	27.1	24.8
18:2 Linoleic	49.4	52.0	50.5	52.9
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	5.30	5.78	5.87	5.99
20:0 Arachidic	0.377	0.346	0.401	0.336
20:1 Eicosenoic	0.230	0.201	0.261	0.209
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.382	0.361	0.395	0.376

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	8	8	8	8
Sample Description	L04/E08/R1	L04/E08/R2	L04/E08/R3	L04/E08/R4
Covance LIMS #	10200335	10200106	10200047	10200249
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.6	10.5	10.6	10.7
16:1 Palmitoleic	< LOQ	0.115	0.126	0.118
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.54	4.58	4.51	4.52
18:1 Oleic	25.8	26.3	27.0	25.5
18:2 Linoleic	51.4	50.8	50.0	51.4
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	6.85	6.79	6.83	6.96
20:0 Arachidic	0.351	0.357	0.352	0.352
20:1 Eicosenoic	0.188	0.191	0.188	0.192
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.354	0.354	0.351	0.349

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	8	8	8	8
Sample Description	L07/E08/R1	L07/E08/R2	L07/E08/R3	L07/E08/R4
Covance LIMS #	10200141	10200060	10200112	10200388
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	11.3	11.3	11.2	11.1
16:1 Palmitoleic	0.109	0.114	0.110	0.105
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.95	5.08	5.02	4.84
18:1 Oleic	28.3	27.7	28.2	27.5
18:2 Linoleic	48.7	49.3	48.8	49.8
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	5.59	5.48	5.55	5.58
20:0 Arachidic	0.438	0.442	0.446	0.439
20:1 Eicosenoic	0.246	0.239	0.259	0.283
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.412	0.427	0.421	0.424

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	8	8	8	8
Sample Description	L08/E08/R1	L08/E08/R2	L08/E08/R3	L08/E08/R4
Covance LIMS #	10200244	10200360	10200350	10200131
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.7	10.6	10.5	10.6
16:1 Palmitoleic	< LOQ	0.122	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	5.38	5.44	5.64	5.55
18:1 Oleic	24.3	24.0	24.8	24.8
18:2 Linoleic	51.8	51.9	51.2	51.4
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	6.84	6.91	6.79	6.65
20:0 Arachidic	0.419	0.416	0.435	0.426
20:1 Eicosenoic	0.189	0.175	0.181	0.179
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.384	0.377	0.410	0.398

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	8	8	8	8
Sample Description	L09/E08/R1	L09/E08/R2	L09/E08/R3	L09/E08/R4
Covance LIMS #	10200110	10200344	10200372	10200048
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	11.4	11.3	11.0	11.2
16:1 Palmitoleic	0.132	0.131	0.126	0.127
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.56	4.50	4.61	4.53
18:1 Oleic	25.0	25.2	25.2	24.8
18:2 Linoleic	51.6	51.8	51.8	52.1
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	6.38	6.28	6.33	6.26
20:0 Arachidic	0.355	0.353	0.363	0.358
20:1 Eicosenoic	0.195	0.193	0.189	0.200
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.355	0.353	0.352	0.351

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	8	8	8	8
Sample Description	L10/E08/R1	L10/E08/R2	L10/E08/R3	L10/E08/R4
Covance LIMS #	10200120	10200043	10200218	10200281
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.2	10.1	10.3	10.3
16:1 Palmitoleic	0.141	0.137	0.140	0.121
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	5.56	5.08	5.60	4.72
18:1 Oleic	27.9	28.0	27.6	25.9
18:2 Linoleic	49.1	49.5	49.2	51.5
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	6.08	6.12	6.12	6.57
20:0 Arachidic	0.430	0.400	0.431	0.372
20:1 Eicosenoic	0.187	0.203	0.191	0.209
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.417	0.400	0.417	0.370

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	9	9	9	9
Sample Description	L01/E09/R1	L01/E09/R2	L01/E09/R3	L01/E09/R4
Covance LIMS #	10200288	10200376	10200124	10200123
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	11.7	11.7	11.8	11.7
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	0.127	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.38	4.52	4.40	4.34
18:1 Oleic	18.6	19.1	18.9	18.4
18:2 Linoleic	54.4	54.1	54.3	54.8
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	9.86	9.50	9.68	9.80
20:0 Arachidic	0.348	0.376	0.348	0.347
20:1 Eicosenoic	0.172	0.182	0.161	0.162
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.383	0.412	0.386	0.392

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	9	9	9	9
Sample Description	L02/E09/R1	L02/E09/R2	L02/E09/R3	L02/E09/R4
Covance LIMS #	10200079	10200150	10200069	10200345
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	11.7	11.6	11.7	11.8
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.72	4.70	4.81	4.74
18:1 Oleic	22.5	22.7	22.6	22.8
18:2 Linoleic	52.4	52.0	52.2	51.8
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	7.77	8.05	7.80	7.86
20:0 Arachidic	0.369	0.369	0.381	0.376
20:1 Eicosenoic	0.176	0.179	0.179	0.188
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.369	0.379	0.384	0.386

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	9	9	9	9
Sample Description	L03/E09/R1	L03/E09/R2	L03/E09/R3	L03/E09/R4
Covance LIMS #	10200354	10200073	10200290	10200224
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	11.9	12.0	11.9	11.8
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.83	4.95	4.53	5.12
18:1 Oleic	26.4	24.6	24.0	27.2
18:2 Linoleic	48.9	49.7	51.2	47.7
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	6.91	7.62	7.32	7.11
20:0 Arachidic	0.427	0.432	0.390	0.446
20:1 Eicosenoic	0.232	0.228	0.225	0.221
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.453	0.431	0.412	0.460

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	9	9	9	9
Sample Description	L04/E09/R1	L04/E09/R2	L04/E09/R3	L04/E09/R4
Covance LIMS #	10200349	10200204	10200342	10200324
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	11.7	11.7	11.5	11.6
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	0.115	0.117
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.53	4.80	4.72	4.82
18:1 Oleic	21.6	21.9	21.7	22.2
18:2 Linoleic	52.7	52.2	52.6	52.1
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	8.58	8.41	8.39	8.21
20:0 Arachidic	0.367	0.397	0.375	0.378
20:1 Eicosenoic	0.196	0.190	0.188	0.181
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.386	0.418	0.381	0.402

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	9	9	9	9
Sample Description	L07/E09/R1	L07/E09/R2	L07/E09/R3	L07/E09/R4
Covance LIMS #	10200053	10200223	10200241	10200366
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	12.0	11.9	11.8	12.0
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	5.78	6.05	5.83	5.60
18:1 Oleic	26.1	27.4	26.0	25.7
18:2 Linoleic	48.4	46.8	48.5	48.7
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	6.56	6.59	6.61	6.75
20:0 Arachidic	0.508	0.534	0.502	0.495
20:1 Eicosenoic	0.233	0.234	0.223	0.233
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.471	0.498	0.473	0.471

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	9	9	9	9
Sample Description	L08/E09/R1	L08/E09/R2	L08/E09/R3	L08/E09/R4
Covance LIMS #	10200369	10200118	10200222	10200143
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	11.7	11.6	11.8	11.8
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	6.32	6.00	5.92	5.61
18:1 Oleic	23.2	23.4	22.8	22.6
18:2 Linoleic	49.7	50.1	50.5	51.2
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	7.85	7.72	7.80	7.79
20:0 Arachidic	0.511	0.481	0.472	0.445
20:1 Eicosenoic	0.190	0.184	0.186	0.182
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.467	0.452	0.430	0.415

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	9	9	9	9
Sample Description	L09/E09/R1	L09/E09/R2	L09/E09/R3	L09/E09/R4
Covance LIMS #	10200264	10200169	10200186	10200125
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	12.0	12.1	12.1	12.1
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.35	4.41	4.49	4.51
18:1 Oleic	21.2	21.3	21.4	22.1
18:2 Linoleic	53.7	53.4	53.3	52.8
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	7.82	7.89	7.80	7.54
20:0 Arachidic	0.356	0.359	0.365	0.366
20:1 Eicosenoic	0.190	0.188	0.196	0.190
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.376	0.394	0.375	0.388

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	9	9	9	9
Sample Description	L10/E09/R1	L10/E09/R2	L10/E09/R3	L10/E09/R4
Covance LIMS #	10200098	10200173	10200260	10200337
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	11.5	11.4	11.5	11.5
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.74	4.73	4.62	4.50
18:1 Oleic	22.9	23.0	22.4	21.8
18:2 Linoleic	52.5	52.5	52.9	53.3
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	7.44	7.34	7.61	7.94
20:0 Arachidic	0.386	0.397	0.385	0.373
20:1 Eicosenoic	0.177	0.201	0.211	0.210
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.404	0.399	0.401	0.392

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	10	10	10	10
Sample Description	L01/E10/R1	L01/E10/R2	L01/E10/R3	L01/E10/R4
Covance LIMS #	10200226	10200181	10200261	10200296
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	11.8	11.9	11.9	11.8
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	0.116	< LOQ	< LOQ	0.117
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.18	4.15	4.20	4.06
18:1 Oleic	20.3	21.0	20.7	19.9
18:2 Linoleic	54.0	53.4	53.6	54.1
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	8.73	8.73	8.81	9.14
20:0 Arachidic	0.318	0.321	0.326	0.315
20:1 Eicosenoic	0.164	0.156	0.162	0.159
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.331	0.345	0.321	0.317

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	10	10	10	10
Sample Description	L02/E10/R1	L02/E10/R2	L02/E10/R3	L02/E10/R4
Covance LIMS #	10200312	10200318	10200358	10200082
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	11.7	11.7	11.7	11.7
16:1 Palmitoleic	0.109	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	0.107	0.110	0.112	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.72	4.68	4.74	4.50
18:1 Oleic	23.3	22.9	23.3	23.2
18:2 Linoleic	51.7	52.0	51.8	52.2
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	7.44	7.69	7.46	7.49
20:0 Arachidic	0.353	0.352	0.360	0.347
20:1 Eicosenoic	0.165	0.168	0.174	0.175
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.330	0.336	0.326	0.322

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	10	10	10	10
Sample Description	L03/E10/R1	L03/E10/R2	L03/E10/R3	L03/E10/R4
Covance LIMS #	10200066	10200338	10200306	10200160
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	11.9	12.0	11.9	12.1
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	3.92	4.07	4.02	3.95
18:1 Oleic	22.4	22.8	22.8	21.7
18:2 Linoleic	54.3	53.7	53.8	54.8
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	6.56	6.60	6.62	6.69
20:0 Arachidic	0.318	0.328	0.333	0.313
20:1 Eicosenoic	0.203	0.213	0.217	0.203
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.337	0.325	0.325	0.334

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	10	10	10	10
Sample Description	L04/E10/R1	L04/E10/R2	L04/E10/R3	L04/E10/R4
Covance LIMS #	10200146	10200213	10200149	10200097
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	11.4	11.5	11.4	11.6
16:1 Palmitoleic	< LOQ	< LOQ	0.107	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	0.108	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.18	4.21	4.29	4.44
18:1 Oleic	22.4	22.0	22.4	22.2
18:2 Linoleic	53.4	53.5	53.2	53.3
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	7.82	7.89	7.64	7.71
20:0 Arachidic	0.329	0.325	0.330	0.342
20:1 Eicosenoic	0.195	0.186	0.176	0.162
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.323	0.331	0.322	0.336

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	10	10	10	10
Sample Description	L07/E10/R1	L07/E10/R2	L07/E10/R3	L07/E10/R4
Covance LIMS #	10200279	10200268	10200179	10200042
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	0.106	0.101	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	11.9	11.5	11.8	11.9
16:1 Palmitoleic	0.107	0.0980	< LOQ	0.104
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	5.06	4.72	5.14	5.07
18:1 Oleic	26.2	26.0	25.9	26.5
18:2 Linoleic	49.6	50.4	50.1	49.3
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	6.03	6.18	6.06	6.07
20:0 Arachidic	0.430	0.406	0.433	0.433
20:1 Eicosenoic	0.236	0.232	0.227	0.235
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.375	0.364	0.398	0.378

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	10	10	10	10
Sample Description	L08/E10/R1	L08/E10/R2	L08/E10/R3	L08/E10/R4
Covance LIMS #	10200293	10200202	10200207	10200068
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	11.4	11.3	11.4	11.3
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	5.37	5.21	5.13	5.19
18:1 Oleic	23.1	22.9	22.8	23.1
18:2 Linoleic	51.6	52.3	52.3	52.4
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	7.55	7.32	7.39	7.13
20:0 Arachidic	0.419	0.402	0.395	0.399
20:1 Eicosenoic	0.193	0.180	0.175	0.170
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.354	0.354	0.354	0.363

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	10	10	10	10
Sample Description	L09/E10/R1	L09/E10/R2	L09/E10/R3	L09/E10/R4
Covance LIMS #	10200299	10200314	10200374	10200158
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	12.0	12.2	12.1	12.1
16:1 Palmitoleic	0.112	0.111	0.111	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.02	4.08	4.05	4.18
18:1 Oleic	23.0	22.3	22.2	22.4
18:2 Linoleic	53.1	53.5	53.7	53.2
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	6.99	6.99	6.98	7.28
20:0 Arachidic	0.313	0.314	0.322	0.331
20:1 Eicosenoic	0.189	0.181	0.189	0.182
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.304	0.329	0.318	0.327

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	10	10	10	10
Sample Description	L10/E10/R1	L10/E10/R2	L10/E10/R3	L10/E10/R4
Covance LIMS #	10200170	10200334	10200300	10200236
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	11.3	11.1	11.2	11.1
16:1 Palmitoleic	< LOQ	0.113	0.105	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	0.105
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.33	4.23	4.20	4.24
18:1 Oleic	23.2	23.1	23.0	22.9
18:2 Linoleic	53.2	53.7	53.5	53.6
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	7.05	6.89	7.12	7.10
20:0 Arachidic	0.346	0.337	0.329	0.342
20:1 Eicosenoic	0.190	0.195	0.197	0.201
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.356	0.330	0.323	0.334

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	11	11	11	11
Sample Description	L01/E11/R1	L01/E11/R2	L01/E11/R3	L01/E11/R4
Covance LIMS #	10200163	10200267	10200333	10200041
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.8	10.4	10.6	10.8
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.00	3.99	4.06	4.27
18:1 Oleic	18.1	18.2	18.5	19.0
18:2 Linoleic	56.1	56.7	56.4	55.1
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	10.1	9.90	9.71	10.0
20:0 Arachidic	0.295	0.295	0.301	0.327
20:1 Eicosenoic	0.154	0.158	0.166	0.164
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.338	0.316	0.321	0.341

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	11	11	11	11
Sample Description	L02/E11/R1	L02/E11/R2	L02/E11/R3	L02/E11/R4
Covance LIMS #	10200235	10200155	10200211	10200339
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.3	10.5	10.4	10.3
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.46	4.40	4.49	4.41
18:1 Oleic	21.9	22.0	22.0	22.4
18:2 Linoleic	54.4	54.1	54.0	53.8
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	8.08	8.17	8.25	8.26
20:0 Arachidic	0.330	0.323	0.330	0.321
20:1 Eicosenoic	0.178	0.170	0.174	0.178
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.308	0.327	0.316	0.310

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	11	11	11	11
Sample Description	L03/E11/R1	L03/E11/R2	L03/E11/R3	L03/E11/R4
Covance LIMS #	10200341	10200044	10200157	10200311
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.6	10.5	10.3	10.3
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	3.80	3.89	3.75	3.84
18:1 Oleic	21.9	22.2	21.8	22.0
18:2 Linoleic	55.5	55.2	55.9	55.5
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	7.37	7.36	7.38	7.54
20:0 Arachidic	0.302	0.302	0.288	0.302
20:1 Eicosenoic	0.218	0.213	0.201	0.212
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.322	0.321	0.329	0.335

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	11	11	11	11
Sample Description	L04/E11/R1	L04/E11/R2	L04/E11/R3	L04/E11/R4
Covance LIMS #	10200175	10200380	10200129	10200326
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.0	9.96	10.1	10.0
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.10	4.12	4.19	4.14
18:1 Oleic	21.3	21.7	21.3	21.6
18:2 Linoleic	55.2	55.0	54.9	54.9
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	8.52	8.39	8.68	8.50
20:0 Arachidic	0.302	0.320	0.308	0.303
20:1 Eicosenoic	0.181	0.210	0.174	0.179
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.326	0.332	0.319	0.327

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	11	11	11	11
Sample Description	L07/E11/R1	L07/E11/R2	L07/E11/R3	L07/E11/R4
Covance LIMS #	10200273	10200132	10200191	10200183
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	9.98	10.4	10.3	10.1
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.67	4.80	4.81	4.65
18:1 Oleic	26.3	25.9	25.7	26.6
18:2 Linoleic	51.4	51.1	51.4	51.1
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	6.61	6.81	6.70	6.59
20:0 Arachidic	0.390	0.392	0.398	0.388
20:1 Eicosenoic	0.231	0.222	0.227	0.234
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.359	0.377	0.379	0.369

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	11	11	11	11
Sample Description	L08/E11/R1	L08/E11/R2	L08/E11/R3	L08/E11/R4
Covance LIMS #	10200109	10200280	10200239	10200240
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.1	9.73	10.0	10.0
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	5.18	4.89	5.28	5.18
18:1 Oleic	22.4	22.1	22.7	22.2
18:2 Linoleic	53.4	54.4	53.0	53.8
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	8.09	8.05	8.08	7.88
20:0 Arachidic	0.383	0.365	0.389	0.383
20:1 Eicosenoic	0.182	0.197	0.181	0.176
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.348	0.330	0.355	0.349

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	11	11	11	11
Sample Description	L09/E11/R1	L09/E11/R2	L09/E11/R3	L09/E11/R4
Covance LIMS #	10200192	10200284	10200080	10200387
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.4	10.6	10.5	10.5
16:1 Palmitoleic	< LOQ	0.109	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	3.90	4.03	4.01	4.04
18:1 Oleic	20.9	21.7	21.8	21.2
18:2 Linoleic	56.0	55.2	55.0	55.5
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	7.92	7.63	7.87	7.90
20:0 Arachidic	0.288	0.302	0.299	0.321
20:1 Eicosenoic	0.179	0.191	0.186	0.199
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.316	0.307	0.311	0.323

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	11	11	11	11
Sample Description	L10/E11/R1	L10/E11/R2	L10/E11/R3	L10/E11/R4
Covance LIMS #	10200375	10200257	10200292	10200381
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	9.78	9.88	9.78	9.85
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.36	4.27	4.39	4.13
18:1 Oleic	23.1	23.2	23.40	22.1
18:2 Linoleic	54.7	54.5	54.20	55.4
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	7.18	7.29	7.38	7.61
20:0 Arachidic	0.336	0.327	0.333	0.327
20:1 Eicosenoic	0.214	0.200	0.206	0.216
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.345	0.325	0.325	0.341

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	12	12	12	12
Sample Description	L01/E12/R1	L01/E12/R2	L01/E12/R3	L01/E12/R4
Covance LIMS #	10200282	10200077	10200059	10200135
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	11.1	11.0	11.0	11.0
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	0.119	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	3.94	4.06	4.02	4.00
18:1 Oleic	20.1	20.6	20.5	20.4
18:2 Linoleic	54.9	54.7	54.7	54.8
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	9.08	8.92	9.00	9.03
20:0 Arachidic	0.305	0.310	0.308	0.304
20:1 Eicosenoic	0.170	0.164	0.158	0.164
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.332	0.336	0.347	0.329

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	12	12	12	12
Sample Description	L02/E12/R1	L02/E12/R2	L02/E12/R3	L02/E12/R4
Covance LIMS #	10200178	10200105	10200227	10200176
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.9	11.0	11.0	10.8
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.65	4.77	4.69	4.61
18:1 Oleic	23.6	23.8	23.5	23.7
18:2 Linoleic	51.9	51.7	51.9	52.0
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	7.99	7.89	7.98	7.97
20:0 Arachidic	0.352	0.361	0.349	0.355
20:1 Eicosenoic	0.170	0.176	0.177	0.175
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.368	0.354	0.349	0.344

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	12	12	12	12
Sample Description	L03/E12/R1	L03/E12/R2	L03/E12/R3	L03/E12/R4
Covance LIMS #	10200140	10200086	10200320	10200386
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.6	11.1	11.2	10.7
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.26	3.96	4.08	4.43
18:1 Oleic	31.2	25.2	26.2	27.0
18:2 Linoleic	46.9	52.2	50.8	50.0
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	6.04	6.65	6.75	6.81
20:0 Arachidic	0.365	0.315	0.331	0.389
20:1 Eicosenoic	0.233	0.190	0.220	0.253
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.384	0.354	0.368	0.406

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	12	12	12	12
Sample Description	L04/E12/R1	L04/E12/R2	L04/E12/R3	L04/E12/R4
Covance LIMS #	10200050	10200303	10200304	10200195
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.8	10.7	10.5	10.8
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.24	4.29	4.11	4.16
18:1 Oleic	23.0	23.6	24.2	23.3
18:2 Linoleic	53.0	52.5	52.4	53.0
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	8.16	8.01	7.84	7.84
20:0 Arachidic	0.330	0.329	0.315	0.322
20:1 Eicosenoic	0.198	0.190	0.180	0.184
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.353	0.343	0.337	0.362

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	12	12	12	12
Sample Description	L07/E12/R1	L07/E12/R2	L07/E12/R3	L07/E12/R4
Covance LIMS #	10200277	10200323	10200199	10200332
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.8	10.8	10.8	10.9
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.69	4.95	4.88	4.73
18:1 Oleic	25.5	27.7	27.5	26.4
18:2 Linoleic	51.5	48.9	49.4	50.5
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	6.52	6.53	6.41	6.44
20:0 Arachidic	0.400	0.426	0.414	0.412
20:1 Eicosenoic	0.235	0.244	0.233	0.250
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.397	0.429	0.417	0.412

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	12	12	12	12
Sample Description	L08/E12/R1	L08/E12/R2	L08/E12/R3	L08/E12/R4
Covance LIMS #	10200130	10200062	10200355	10200083
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.2	10.5	10.5	10.6
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	5.34	5.15	5.20	5.09
18:1 Oleic	24.1	23.2	23.2	23.2
18:2 Linoleic	51.3	52.6	52.3	52.5
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	7.98	7.60	7.81	7.77
20:0 Arachidic	0.416	0.395	0.397	0.387
20:1 Eicosenoic	0.186	0.176	0.180	0.179
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.406	0.387	0.389	0.375

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	12	12	12	12
Sample Description	L09/E12/R1	L09/E12/R2	L09/E12/R3	L09/E12/R4
Covance LIMS #	10200055	10200168	10200134	10200084
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	11.2	11.4	11.4	11.4
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.20	4.11	4.24	4.17
18:1 Oleic	24.6	23.1	22.9	23.1
18:2 Linoleic	52.0	53.1	53.0	53.0
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	7.07	7.32	7.58	7.46
20:0 Arachidic	0.334	0.324	0.329	0.326
20:1 Eicosenoic	0.193	0.187	0.189	0.195
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.365	0.356	0.346	0.342

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	12	12	12	12
Sample Description	L10/E12/R1	L10/E12/R2	L10/E12/R3	L10/E12/R4
Covance LIMS #	10200203	10200171	10200182	10200353
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	10.5	10.2	10.3	10.5
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.23	4.57	4.34	4.21
18:1 Oleic	24.0	25.3	24.9	23.6
18:2 Linoleic	53.1	52.0	52.7	53.3
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	7.28	6.92	6.86	7.40
20:0 Arachidic	0.323	0.359	0.339	0.333
20:1 Eicosenoic	0.188	0.203	0.200	0.214
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.360	0.384	0.366	0.370

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	13	13	13	13
Sample Description	L01/E13/R1	L01/E13/R2	L01/E13/R3	L01/E13/R4
Covance LIMS #	10200057	10200206	10200362	10200085
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	9.85	10.0	9.94	9.92
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.09	3.87	3.75	3.96
18:1 Oleic	21.8	20.8	20.6	21.3
18:2 Linoleic	54.1	55.0	55.4	54.5
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	9.39	9.48	9.46	9.48
20:0 Arachidic	0.330	0.317	0.303	0.324
20:1 Eicosenoic	0.179	0.178	0.180	0.185
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.333	0.321	0.306	0.321

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	13	13	13	13
Sample Description	L02/E13/R1	L02/E13/R2	L02/E13/R3	L02/E13/R4
Covance LIMS #	10200187	10200161	10200159	10200162
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	9.59	9.61	9.71	9.58
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.43	4.93	4.63	4.64
18:1 Oleic	24.7	26.2	25.4	25.5
18:2 Linoleic	52.5	50.5	51.2	51.4
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	7.98	7.77	8.19	7.99
20:0 Arachidic	0.355	0.397	0.368	0.374
20:1 Eicosenoic	0.191	0.196	0.189	0.197
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.323	0.352	0.339	0.344

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	13	13	13	13
Sample Description	L03/E13/R1	L03/E13/R2	L03/E13/R3	L03/E13/R4
Covance LIMS #	10200250	10200297	10200188	10200205
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	9.32	8.93	9.19	9.39
16:1 Palmitoleic	0.110	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	3.89	3.97	4.10	3.84
18:1 Oleic	30.1	35.2	31.8	29.1
18:2 Linoleic	49.2	45.0	47.6	50.3
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	6.47	5.87	6.27	6.43
20:0 Arachidic	0.349	0.371	0.376	0.346
20:1 Eicosenoic	0.259	0.274	0.267	0.260
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.338	0.366	0.363	0.335

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	13	13	13	13
Sample Description	L04/E13/R1	L04/E13/R2	L04/E13/R3	L04/E13/R4
Covance LIMS #	10200231	10200101	10200214	10200322
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	9.34	9.45	9.46	9.47
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.14	4.24	4.22	4.10
18:1 Oleic	26.2	26.6	26.4	25.4
18:2 Linoleic	51.7	51.1	51.5	52.4
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	7.75	7.74	7.57	7.78
20:0 Arachidic	0.344	0.351	0.351	0.337
20:1 Eicosenoic	0.215	0.191	0.220	0.207
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.348	0.344	0.334	0.339

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	13	13	13	13
Sample Description	L07/E13/R1	L07/E13/R2	L07/E13/R3	L07/E13/R4
Covance LIMS #	10200305	10200165	10200075	10200234
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	9.13	9.57	9.74	9.66
16:1 Palmitoleic	0.109	0.109	< LOQ	0.105
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	5.05	4.49	4.73	4.54
18:1 Oleic	33.3	30.9	28.8	29.1
18:2 Linoleic	45.5	47.6	49.2	49.3
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	5.69	6.20	6.35	6.23
20:0 Arachidic	0.491	0.434	0.458	0.438
20:1 Eicosenoic	0.286	0.281	0.270	0.273
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.429	0.406	0.411	0.389

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	13	13	13	13
Sample Description	L08/E13/R1	L08/E13/R2	L08/E13/R3	L08/E13/R4
Covance LIMS #	10200194	10200363	10200070	10200301
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	9.33	9.21	9.18	9.37
16:1 Palmitoleic	< LOQ	< LOQ	< LOQ	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	5.20	5.39	5.36	5.15
18:1 Oleic	25.2	25.8	26.3	25.3
18:2 Linoleic	51.9	51.0	50.9	51.7
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	7.36	7.60	7.24	7.49
20:0 Arachidic	0.433	0.455	0.450	0.418
20:1 Eicosenoic	0.203	0.211	0.210	0.191
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.381	0.379	0.383	0.351

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	13	13	13	13
Sample Description	L09/E13/R1	L09/E13/R2	L09/E13/R3	L09/E13/R4
Covance LIMS #	10200346	10200373	10200087	10200164
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	9.77	9.63	9.64	9.60
16:1 Palmitoleic	0.119	0.117	< LOQ	0.117
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	3.85	3.88	4.17	4.02
18:1 Oleic	26.5	26.0	28.3	27.6
18:2 Linoleic	51.6	52.0	49.6	50.3
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	7.29	7.49	7.39	7.41
20:0 Arachidic	0.323	0.328	0.350	0.345
20:1 Eicosenoic	0.218	0.217	0.199	0.222
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.320	0.315	0.335	0.344

Table 3
Compositional Analyses of Seed-Percent of Total Fatty Acids

Entry Number	13	13	13	13
Sample Description	L10/E13/R1	L10/E13/R2	L10/E13/R3	L10/E13/R4
Covance LIMS #	10200128	10200067	10200278	10200263
Fatty Acids % of Total				
8:0 Caprylic	< LOQ	< LOQ	< LOQ	< LOQ
10:0 Capric	< LOQ	< LOQ	< LOQ	< LOQ
12:0 Lauric	< LOQ	< LOQ	< LOQ	< LOQ
14:0 Myristic	< LOQ	< LOQ	< LOQ	< LOQ
14:1 Myristoleic	< LOQ	< LOQ	< LOQ	< LOQ
15:0 Pentadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
15:1 Pentadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
16:0 Palmitic	8.99	9.00	8.98	9.01
16:1 Palmitoleic	< LOQ	0.117	0.111	< LOQ
17:0 Heptadecanoic	< LOQ	< LOQ	< LOQ	< LOQ
17:1 Heptadecenoic	< LOQ	< LOQ	< LOQ	< LOQ
18:0 Stearic	4.22	4.21	3.98	4.35
18:1 Oleic	26.2	26.4	25.4	25.8
18:2 Linoleic	52.7	52.5	53.6	52.8
18:3 Gamma Linolenic	< LOQ	< LOQ	< LOQ	< LOQ
18:3 Linolenic	6.98	6.85	7.04	7.13
20:0 Arachidic	0.356	0.359	0.346	0.383
20:1 Eicosenoic	0.216	0.220	0.241	0.235
20:2 Eicosadienoic	< LOQ	< LOQ	< LOQ	< LOQ
20:4 Arachidonic	< LOQ	< LOQ	< LOQ	< LOQ
20:3 Eicosatrienoic	< LOQ	< LOQ	< LOQ	< LOQ
22:0 Behenic	0.339	0.353	0.333	0.350

APPENDIX A: ANALYTICAL METHOD SUMMARIES AND REFERENCE STANDARDS

Acid Detergent Fiber (ADFA)
The ANKOM2000 Fiber Analyzer automated the process of removal of proteins, carbohydrates, and ash. Fats and pigments were removed with an acetone wash prior to analysis. The fibrous residue that was primarily cellulose and lignin and insoluble protein complexes remained in the Ankom filter bag, and was determined gravimetrically. The results are reported on a dry weight basis. The limit of quantitation was calculated as 0.100% on a fresh weight basis.

References:
Forage and Fiber Analyses, Agriculture Handbook No.379, United States Department of Agriculture, Washington, D.C. (1970).

Komarek, A. R., Robertson J. B., and Van Soest, P. J., "A Comparison of Methods for Determining ADF Using the Filter Bag Technique versus Conventional Filtration," *Journal of Dairy Science* Vol. 77 Supplement 1, (1993).

Amino Acid Composition (TALC/TPLC)
Total aspartic acid (including asparagine)
Total threonine
Total serine
Total glutamic acid (including glutamine)
Total proline
Total glycine
Total alanine
Total valine
Total isoleucine
Total leucine
Total tyrosine
Total phenylalanine
Total histidine
Total lysine
Total arginine
Total tryptophan
Total methionine
Total cystine (including cysteine)

The samples were hydrolyzed in 6N hydrochloric acid for 24 hours at approximately 110ºC. Phenol was added to the 6N hydrochloric acid to prevent halogenation of tyrosine. Cystine and cysteine are converted to S-2-carboxyethylthiocysteine by the addition of dithiodipropionic acid. Tryptophan was hydrolyzed from proteins by heating at approximately 110ºC in 4.2N sodium hydroxide for 20 hours.

The samples were analyzed by HPLC after pre-injection derivatization. The primary amino acids were derivatized with o-phthalaldehyde (OPA) and the secondary amino acids are derivatized with fluorenylmethyl chloroformate (FMOC) before injection. The results are reported on a dry weight basis. The limit of quantitation for this study was calculated as 0.100 mg/g on a fresh weight basis.

Reference Standards:

Component	Manufacturer	Lot No.	Purity(%)
L-Alanine	Fluka	1388605	99.8
L-Arginine Monohydrochloride	Fluka	1361811	100
L-Aspartic Acid	Fluka	1337624	99.9
L-Cystine	Fluka	1386158	99.8
L-Cystine	Fluka	1418036	100.2
L-Glutamic Acid	Fluka	1423805	100.2
Glycine	Fluka	1119375	100
L-Histidine Monohydrochloride Monohydrate	Fluka	1388486	99.9
L-Isoleucine	Fluka	1423806	100
L-Leucine	Sigma	028K0027	100
L-Lysine Monohydrochloride	Fluka	1362380	100.2
L-Methionine	Fluka	1423807	99.9
L-Phenylalanine	Sigma-Aldrich	048K0662	>99
L-Proline	Fluka	1414414	99.7
L-Serine	Fluka	1336081	99.9
L-Threonine	Fluka	1234249	100
L-Tryptophan	Sigma-Aldrich	020m0012v	99.4
L-Tyrosine	Sigma-Aldrich	1419640	100
L-Valine	Fluka	1352709	100

References:

R. Schuster "Determination of Amino Acids in Biological, Pharmaceutical, Plant and Food Samples by Automated Precolumn Derivatization and High-Performance Liquid Chromatography", J. Chromatogr., 431, 271-284, (1988).

Henderson, J. W., Ricker, R. D., Bidlingmeyer, B. A., Woodward, C., "Rapid, Accurate, Sensitive, and Reproducible High-Performance Liquid Chromatography Analysis of Amino Acids, Amino Acid Analysis Using Zorbax Eclipse-AAA columns and the Agilent 1100 High-Performance Liquid Chromatography," Agilent Publication, (2000).

Henderson, J. W., Brooks, A., Agilent Application Note, "Improved Amino Acid Methods using Agilent Zorbax Eclipse Plus C18 Columns for a Variety of Agilent LC Instrumentation and Separation Goals", (2010).

Barkholt and Jensen, "Amino Acid Analysis: Determination of Cysteine plus Half-Cystine in Proteins after Hydrochloric Acid Hydrolysis with a Disulfide Compound as Additive," Analytical Biochemistry, 177, 318-322, (1989).

Official Methods of Analysis of AOAC INTERNATIONAL, "Tryptophan in Foods and Food and Feed Ingredients", Method 988.15, 18th Ed., Method 988.15, AOAC INTERNATIONAL, Gaithersburg, MD, (2011).

Ash (ASHM)
The sample was placed in an electric furnace at 550°C and ignited. The nonvolatile matter remaining was quantitated gravimetrically and calculated to determine percent ash. The results are reported on dry weight basis. The limit of quantitation was calculated as 0.100% on a fresh weight basis.

Reference:
Official Methods of Analysis of AOAC INTERNATIONAL, Method 923.03, 18th Ed., AOAC INTERNATIONAL, Gaithersburg, MD, (2005).

Beta Carotene (BCLC)
The samples were saponified with potassium hydroxide and extracted with hexane. The samples were then injected on a reverse phase high-performance liquid chromatography system with ultraviolet light detection. Quantitation was achieved with a linear regression analysis. The results are reported on a dry weight basis. The limit of quantitation was calculated as 0.0200 mg/100g on a fresh weight basis.

Reference Standard:
Sigma-Aldrich, Beta Carotene, 100%, Lot Number 079K1729

References:
Official Methods of Analysis of AOAC INTERNATIONAL, Method 941.15, 18th Ed., AOAC INTERNATIONAL, Gaithersburg, MD, (2005).

Quackenbush, F. W., Reverse Phase HPLC Separation of cis- and trans-Carotenoids and it's Application to Beta Carotenes in Food Materials," *Journal of Liquid Chromatography*, 10: 643-653, (1987).

Carbohydrate (CHO)
The total carbohydrate level was calculated by difference using the fresh weight-derived data and the following equation:

% carbohydrates = 100 % - (% protein + % fat + % moisture + % ash)

The limit of quantitation was calculated as 0.100% on a fresh weight basis.

Reference:
United States Department of Agriculture, "Energy Value of Foods", *Agriculture Handbook No. 74*, pp. 2-11, (1973).

Fat by Acid Hydrolysis (FAAH)
The sample was hydrolyzed with hydrochloric acid. The fat was extracted using ether and hexane. The extract was dried down and filtered through a sodium sulfate column. The remaining extract was then evaporated, dried, and weighed. The hexane extract was then evaporated again on a steambath under nitrogen, dried, and weighed. The results are reported on dry weight basis. The limit of quantitation was calculated as 0.100% on a fresh weight basis.

Reference:
Official Methods of Analysis of AOAC INTERNATIONAL, Methods 922.06 and 954.02, 18th Ed., AOAC INTERNATIONAL, Gaithersburg, MD, (2005).

Fat by Soxhlet Extraction (FSOX)
The sample was weighed into a cellulose thimble containing sodium sulfate and dried to remove excess moisture. Pentane was dripped through the sample to remove the fat. The extract was then evaporated, dried, and weighed. The results are reported on a dry weight basis. The limit of quantitation was calculated as 0.100% on a fresh weight basis.

Reference:
Official Methods of Analysis of AOAC INTERNATIONAL, Methods 960.39 and 948.22, 18th Ed., AOAC INTERNATIONAL, Gaithersburg, MD, (2005).

Fatty Acids (FAPM)
The lipid was extracted and saponified with 0.5N sodium hydroxide in methanol. The saponification mixture was methylated with 14% boron trifluoride in methanol. The resulting methyl esters were extracted with heptane containing an internal standard. The methyl esters of the fatty acids were analyzed by gas chromatography using external standards for quantitation. The results are reported on a dry weight basis. The limit of quantitation was calculated as 0.0200% on a fresh weight basis.

Component	Lot Number	Component	Weight (%)	Purity (%)
Nu-Chek Prep GLC Reference Standard Hazelton No. 1	JY20-U	Methyl Octanoate	16.66	99.6
		Methyl Decanoate	16.66	99.6
		Methyl Laurate	16.66	99.8
		Methyl Myristate	16.66	99.8
		Methyl Palmitoleate	16.66	99.7
		Methyl Linolenate	16.66	99.5
Nu-Chek Prep GLC Reference Standard Hazelton No. 2	AU16-U	Methyl Arachidate	33.33	99.6
		Methyl 11-Eicosenoate	33.33	99.5
		Methyl Arachidonate	33.33	99.6
Nu-Chek Prep GLC Reference Standard Hazelton No. 3	J28-U	Methyl Myristoleate	12.5	99.5
		Methyl Pentadecanoate	12.5	99.6
		Methyl 10-Pentadecenoate	12.5	99.5
		Methyl Heptadecanoate	12.5	99.6
		Methyl 10-Heptadecenoate	12.5	99.5
		Methyl 11-14 Eicosadienoate	12.5	99.6
		Methyl Behenate	12.5	99.8
		Methyl 11-14-17 Eicosatrienoate	12.5	99.5
Nu-Chek Prep GLC Reference Standard Hazelton No. 4	MA30-U	Methyl Palmitate	27.0	99.6
		Methyl Stearate	19.0	99.5
		Methyl Oleate	27.0	99.8
		Methyl Linoleate	27.0	99.8
Nu-Chek Prep Methyl Gamma Linolenate	U-63M-M18-U	Not applicable	Not applicable	>99
Sigma-Aldrich Methyl Tridecanoate (internal standard)	1434249	Not applicable	Not applicable	98.8

Reference:
Official Methods and Recommended Practices of the AOCS, Official methods Ce 2-66, Ce 1e-91 – (Revised 2001), and Ce 1k-07 (2007) – Changed to Ce1k-09 (Reapproved 2009), The American Oil Chemists' Society, Champaign, IL.

Folic acid (FOAN)
The sample was hydrolyzed in a potassium phosphate buffer with the addition of ascorbic acid to protect the folic acid during autoclaving. Following hydrolysis by autoclaving, the sample was treated with a chicken-pancreas enzyme and incubated approximately 18 hours to liberate the bound folic acid. The amount of folic acid was determined by comparing the growth response of the sample, using the bacteria *Lactobacillus casei*, with the growth response of a folic acid standard. This response was measured turbidimetrically. The results are reported on a dry weight basis. The limit of quantitation was calculated as 0.00600 mg/100g on a fresh weight basis.

Reference Standard:
USP, Folic acid, 98.9%, Lot Number Q0G151

References:
Official Methods of Analysis of AOAC INTERNATIONAL, Methods 992.05 and 960.46, 18th Ed., AOAC INTERNATIONAL, Gaithersburg, MD, (2005).

Methods of Analysis for Infant Formulas, Infant Formula Council, Atlanta, Georgia, Section C-2, (1985).

ICP Emission Spectrometry (ICPS)
The sample was dried, precharred, and ashed overnight in a muffle set to maintain 500°C. The ashed sample was re-ashed with nitric acid, treated with hydrochloric acid, taken to dryness, and put into a solution of 5% hydrochloric acid. The amount of each element was determined at appropriate wavelengths by comparing the emission of the unknown sample, measured on the inductively coupled plasma spectrometer, with the emission of the standard solutions. The results are reported on a dry weight basis. The following limits of quantitation were calculated on a fresh weight basis:

Reference Standards and Limits of Quantitation:

Mineral	Manufacturer	Lot Numbers	Concentration (µg/ml)	Limit of Quantitation (ppm)
Calcium	Inorganic Ventures	D2-MEB349023MCA, D2-MEB349025	200.00, 1000.00	20.0
Iron	Inorganic Ventures	D2-MEB349023MCA, D2-MEB349026 E2-MEB360079MCA, E2-MEB360082	10.00, 50.00	2.00
Magnesium	Inorganic Ventures	D2-MEB349023MCA, D2-MEB349024MCA	50.00, 250.00	20.0
Phosphorus	Inorganic Ventures	D2-MEB349023MCA, D2-MEB349025	200.00, 1000.00	20.0
Potassium	Inorganic Ventures	D2-MEB349023MCA, D2-MEB349025	200.00, 1000.00	100
Potassium	SPEX Industries	AC11-228K	10000	100

Reference:
Official Methods of Analysis of AOAC INTERNATIONAL, Methods 984.27 and 985.01, 18th Ed., AOAC INTERNATIONAL, Gaithersburg, MD, (2005).

Isoflavones Analysis (ISOF)
The sample was extracted using a solution of hydrochloric acid and reagent alcohol heated on hot plates. The extract was brought to volume, diluted, and centrifuged. An aliquot of the supernatant was placed onto a C18 solid-phase extraction column. Unwanted components of the matrix were rinsed off with 20% methanol and then the isoflavones were eluted with 80% methanol. The sample was analyzed on a high-performance liquid chromatography system with ultraviolet detection and was compared to an external standard curve of known standards for quantitation. The results are reported on a dry weight basis. The limit of quantitation was calculated as 10.0 ppm on a fresh weight basis.

Reference Standards:
Indofine Chemical Company, Inc., Daidzein, 99% , Lot Number 071212146
Indofine Chemical Company, Inc., Glycitein, 99%, Lot Number 0704034
Indofine Chemical Company, Inc., Genistein, 99.35%, Lot Number 0604043

References:
Seo, A. and Morr, C. V., "Improved High-Performance Liquid Chromatographic Analysis of Phenolic Acids and Isoflavonoids from Soybean Protein Products", *Journal of Agricultural and Food Chemistry, 32*(3):530-533, (1984).

Pettersson, H., and Kiessling, K. H., "Liquid Chromatographic Determination of the Plant Estrogens Coumestrol and Isoflavones in Animal Feed", *Association of Official Analytical Chemists Journal,* 67(3):503-506, (1984).

Lectins (LCTN)
The determination of lectins was based on the ability of lectin (a hemagglutinin) to bind to specific sugars present on the surface of red blood cells (RBCs) of different animal species resulting in the agglutination of RBCs. Samples were defatted and extracted with a saline solution. Agglutination of trypsinized rabbit RBCs was measured with a spectrophotometer at a wavelength of 620 nm. The results are reported on a dry weight basis. The limit of quantitation was calculated as 0.40 H.U./mg/sample and 0.80 H.U./mg/protein on a fresh weight basis.

References:
Liener, I. E., "The Photometric Determination of the Hemagglutinating Activity of Soyin and Crude Soybean Extracts," *Archives of Biochemistry and Biophysics,* 54:223-231, (1955).

Liener, I. E. and Turner, R. H., "The Use of Glutaraldehyde-Treated Erythrocyctes for Assaying the Agglutinating Activity of Lectins", Analytical Biochemistry, 68, 651-653 (1975).

Kakade M. L., Simons, N. R., Liener, I. E., and Lambert, J. W., "Biochemical and Nutritional Assessment of Different Varieties of Soybeans," *Journal of Agricultural and Food Chemistry,* Jan-Feb; 20(1): 87-90 (1972).

Moisture (M100)
The sample was dried in a vacuum oven at approximately 100°C. The moisture weight loss was determined and converted to percent moisture. The results are reported on fresh weight basis. The limit of quantitation was calculated as 0.100% on a fresh weight basis.

Reference:
Official Methods of Analysis of AOAC INTERNATIONAL, 18th Ed., Methods 926.08 and 925.09, AOAC INTERNATIONAL, Gaithersburg, MD, (2005).

Neutral Detergent Fiber (NDFA)
The ANKOM2000 Fiber Analyzer automated the process of the removal of protein, carbohydrate, and ash. If necessary, fats and pigments were removed with an acetone wash prior to analysis. Hemicellulose, cellulose, lignin and insoluble protein fraction was left in the filter bag and determined gravimetrically. The results are reported on a dry weight basis. The limit of quantitation was calculated as 0.100% on a fresh weight basis.

References:
Approved Methods of the American Association of Cereal Chemists, 9th Ed., Method 32.20, (1998).

Forage and Fiber Analyses, Agriculture Handbook No. 379, United States Department of Agriculture, (1970).

Komarek, A. R., Robertson, J. B., and Van Soest, P. J., "Comparison of the Filter Bag Technique to Conventional Filtration in the Van Soest NDF Analysis of 21 Feeds," Presented at National Conference on Forage Quality, Evaluation and Utilization Proceedings (University of Nebraska) (1994).

Phytic Acid (PHYT)
The sample was extracted using 0.5M HCl with ultrasonication. Purification and concentration were accomplished on a silica-based anion-exchange column. The sample was analyzed on a polymer high-performance liquid chromatography column PRP-1, 5µm (150 x 4.1mm) with a refractive index detector. The results are reported on a dry weight basis. The limit of quantitation was calculated as 0.0300% on a fresh weight basis.

Reference Standard:
Sigma-Aldrich, Phytic Acid Sodium Salt Hydrate, 96%, Lot Number 089K0159

References:
Lehrfeld, Jacob, "HPLC Separation and Quantitation of Phytic Acid and Some Inositol Phosphates in Foods: Problem and Solutions," *Journal of Agricultural and Food Chemistry*, 42:2726-2731, (1994).

Lehrfeld, Jacob, "High-Performance Liquid Chromatography Analysis of Phytic Acid on a pH-Stable, Macroporous Polymer Column," *Cereal Chemistry*, 66(6):510-515, (1989).

Protein (PGEN)
The protein and other organic nitrogen in the sample were converted to ammonia by digesting the sample with sulfuric acid containing a catalyst mixture. The acid digest was made alkaline. The ammonia was distilled and then titrated with a previously standardized acid. The percent nitrogen was calculated and converted to equivalent protein using the factor 6.25. The results are reported on dry weight basis. The limit of quantitation was calculated as 0.100% on a fresh weight basis.

References:
Official Methods of Analysis of AOAC INTERNATIONAL, Methods 955.04 and 979.09, 18th Ed., AOAC INTERNATIONAL, Gaithersburg, MD, (2005).

Official Methods and Recommended Practices of the AOCS, 5th Edition, Method Ac 4-91, American Oil Chemists' Society, Champaign, IL, (1997).

Raffinose and Stachyose (SUGT)
Sugars in the sample were extracted with a 50:50 water:methanol solution. Aliquots were taken, dried under inert gas, and then reconstituted with a hydroxylamine hydrochloride solution in pyridine containing phenyl-β-D-glucopyranoside as the internal standard. The resulting oximes were converted to silyl derivatives by treatment with hexamethyldisilazane and trifluoracetic acid treatment, and then analyzed by gas chromatography using a flame ionization detector. The results are reported on a dry weight basis. The limit of quantitation was calculated as 0.0500% on a fresh weight basis.

Reference Standards:
Sigma-Aldrich, D-(+)-Raffinose pentahydrate, 99%, Lot Number 037K1059
Sigma-Aldrich, Stachyose hydrate, 98%, Lot Number 049K3800

References:
Brobst, K. M., "Gas-Liquid Chromatography of Trimethylsilyl Derivatives," *Methods in Carbohydrate Chemistry*, Volume 6, Academic Press, New York, NY, (1972).

Mason, B. S., and Slover, H. T., "A Gas Chromatographic Method for the Determination of Sugars in Foods," *Journal of Agricultural and Food Chemistry*, 19(3):551-554, (1971).

Total Tocopherols (TTLC)
The product was saponified to break down any fat and release vitamin E. The saponified mixture was extracted with an organic solvent, dried down and brought to a suitable volume in hexane. The sample was then quantitated by high-performance liquid chromatography using a silica column. The results are reported on a dry weight basis. The limit of quantitation was calculated as 0.500 mg/100g on a fresh weight basis.

Reference Standards:
USP, Alpha Tocopherol, 98.9%, Lot Number N0F068
MATREYA, rac-beta-Tocopherol, >98%, Lot Numbers 23097
ACROS, D-gamma-Tocopherol, 99.4%, Lot Number A0083534
Sigma-Aldrich, (+)-delta-Tocopherol, 92%, Lot Number 090M1916V

References:
Speek, A. J., Schijver, J., and Schreurs, W. H. P., "Vitamin E Composition of Some Seed Oils as Determined by High-Performance Liquid Chromatography with Fluorometric Quantitation," *Journal of Food Science,* 50(1):121-124, (1985).

Cort, W. M., Vincente, T. S., Waysek, E. H., and Williams, B. D., "Vitamin E Content of Feedstuffs Determined by High-Performance Liquid Chromatographic Fluorescence," *Journal of Agricultural and Food Chemistry,* 31:1330-1333, (1983).

McMurray, C. H., Blanchflower, W. J., and Rice, D. A., "Influence of Extraction Techniques on Determination of α-Tocopherol in Animal Feedstuffs," *Journal of the Association of Official Analytical Chemists,* 63(6):1258-1261, (1980).

Total Tocotrienols (TOCS)
The sample was treated with sodium bicarbonate and sodium ascorbate to buffer the solution. Pyrogallol was added as an antioxidant. The sample was extracted with 2,2,4-trimethylpentane (iso-octane) and dimethyl sulfoxide was added to increase extraction efficiency. Methanolic sulfuric acid solution was added to further break down the sample matrix. Additional iso-octane was added to aid in phase separation. The sample was centrifuged, and the supernatant injected on an HPLC with fluorescence detection for quantification. The results are reported on a dry weight basis. The limit of quantitation was calculated as 0.500 mg/100 g on a fresh weight basis.

Reference Standards:
Davos Life Science, d-alpha-Tocotrienol, >97.0%, Lot Number 10060490
Davos Life Science, d-beta-Tocotrienol, >97.0%, Lot Number 10980100
Davos Life Science, d-gamma-Tocotrienol, >97.0%, Lot Number 10060570
Davos Life Science, d-delta-Tocotrienol, >97.0%, Lot Number 10060210

References:
USP 34-NF29, Oil- and Water-Soluble Vitamins with Minerals Tablets, Assay for Vitamin A and E, method 2 (page 1323).

Cort, W. M., Vincente, T. S., Waysek, E. H., and Williams, B. D., "Vitamin E Content of Feedstuffs Determined by High-Performance Liquid Chromatographic Fluorescence," *Journal of Agricultural and Food Chemistry,* 31:1330-1333, (1983).

Franke, A. A., Murphy, S. P., Lacey, R., Custer, L. J., "Tocopherol and Tocotrienol Levels of Foods Consumed in Hawaii," *Journal of Agricultural and Food Chemistry,* 55(3), (2007).

Trypsin Inhibitor (TRIP)
The sample was ground and defatted with petroleum ether. A sample of matrix was extracted with 0.01N sodium hydroxide. Varying aliquots of the sample suspension were exposed to a known amount of trypsin and benzoy1-DL-arginine~p~nitroanilide hydrochloride. The sample was allowed to react for 10 minutes at 37°C. After 10 minutes, the reaction was halted by the addition of acetic acid. The solution was centrifuged, then the absorbance was determined at 410 nm. Trypsin inhibitor activity was determined by photometrically measuring the inhibition of trypsin's reaction with benzoyl-DL-arginine~p~nitroanilide hydrochloride. The results are reported on a dry weight basis. The limit of quantitation was calculated as 1.00 Trypsin Inhibitor Units (TIU)/mg on a fresh weight basis.

References:
Official Methods and Recommended Practices of the American Oil Chemists' Society, 5th Ed., Method Ba 12-75, American Oil Chemists' Society, Champaign, IL, (1997).

Kakade et. al., "Determination of Trypsin Inhibitor Activity of Soy Products: A Collaborative Analysis of an Improved Procedure", Cereal Chemistry, Vol. 51, No. 3, pp 376-384, (1974).

Thiamine Hydrochloride (BIDE)
The sample was autoclaved under weak acid conditions to extract the thiamine. The resulting solution was incubated with a buffered enzyme solution to release any bound thiamine. The solution was purified on a cation-exchange column. An aliquot was reacted with potassium ferricyanide to convert thiamine to thiochrome. The thiochrome was extracted into isobutyl alcohol, measured on a fluorometer, and quantitated by comparison to a known standard. The results are reported as thiamine hydrochloride on a dry weight basis. The limit of quantitation was calculated as 0.0100 mg/100g on a fresh weight basis.

Reference Standard:
USP, Thiamine Hydrochloride, 99.8%, Lot Number O1F236

Reference:
Official Methods of Analysis of AOAC INTERNATIONAL, Methods 942.23, 953.17, and 957.17, 18th Ed, AOAC INTERNATIONAL, Gaithersburg, MD, (2005).

Vitamin B_2 (Riboflavin) (B2FV)
The sample was hydrolyzed with dilute hydrochloric acid and the pH was adjusted to remove interferences. The amount of riboflavin was determined by comparing the growth response of the sample, using the bacteria *Lactobacillus rhamnosus*, with the growth response of multipoint riboflavin standards. The growth response was measured turbidimetrically. The results are reported on a dry weight basis. The limit of quantitation was calculated as 0.0200 mg/100g on a fresh weight basis.

Reference Standard:
USP, Riboflavin, 100.0%, Lot Number N0C021

References:
Official Methods of Analysis of AOAC INTERNATIONAL, Methods 940.33 and 960.46, 18th Ed, AOAC INTERNATIONAL, Gaithersburg, MD, (2005).

The United States Pharmacopeia, Twenty-Ninth Revision, p. 1913, United States Pharmacopeial Convention, Inc., Rockville, MD, (2005).

Vitamin K (VKTK)
The sample was extracted with organic solvents and injected on a reverse phase high-performance liquid chromatography system with post-column reduction and fluorescence detection. Quantitation was achieved with linear regression analysis using a laboratory automation system. The results are reported on a dry weight basis. The limit of quantitation was calculated as 0.0500 µg/g on a fresh weight basis.

Reference Standard:
USP, Phytonadione, 99.7%, Lot Number O0H310

References:
Official Methods of Analysis of AOAC INTERNATIONAL, Methods 992.27 and 980.26, 18th Ed, AOAC INTERNATIONAL, Gaithersburg, MD, (2005).