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DATE: April 1, 2009

TITLE: Composition Analyses of Forage and Seed Collected from MON 87705 Produced in Chile during the 2007-2008 Growing Season

AUTHORS: Denise R. Lundry, Susan G. Riordan, Kathleen D. Miller, and Roy Sorbet

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ABSTRACT: Monsanto Company has developed biotechnology-derived soybean, MON 87705, to generate nutritionally-improved soybean oil with decreased levels of saturated fats (16:0 palmitic acid and 18:0 stearic acid) and increased levels of oleic acid (18:1) through suppression of FAD 2 and FAT B, two key enzymes in the fatty acid biosynthetic pathway. Suppression of these enzymes has been demonstrated to decrease saturated fatty acids and increase oleic acid in the resulting oil (Lightner, J. et al., 2002; Hitz, W. et al., 1999). This oil also has enhanced stability, an improved nutritional profile, and better food functionality. MON 87705 also contains the 5-enolpyruvylshikimate-3-phosphate protein from *Agrobacterium* sp. strain CP4 (CP4 EPSPS) that confers glyphosate tolerance to Roundup® herbicide. MON 87705 soybean are considered compositionally equivalent to conventional soybean except for the intended fatty acid changes.

The purpose of this study was to evaluate the composition of MON 87705 compared to a conventional control that has a genetic background similar to the test substance, but does not contain nor express the decreased saturate trait, the increased oleic trait or the herbicide tolerance trait. In this study, composition analyses of the test and control substances were conducted on forage and seed collected from a Chile field trial during 2007/2008 under the terms of Production Plan REG-07-170. Nineteen commercial conventional soybean varieties were included as reference substances to provide data for the development of a 99% tolerance interval for each component analyzed. The test and control substances were grown in replicated plots at each of five Chile sites [Quilapilun, Chacabuco (QUI); Melipilla, Melipilla (MEL); Calera de Tango, Maipo (CdT); Rancagua, Cachapoal (RAN); San Fernando, Colchagua (SFR)]. Composition analyses of the forage and seed samples included proximates (ash, fat, moisture, and protein), carbohydrates by calculation, acid detergent fiber (ADF), and neutral detergent fiber (NDF). Seed samples were further analyzed for levels of amino acids, fatty acids (C8-C24), trypsin inhibitors, phytic acid, lectin, isoflavones (daidzein, glycitein, and genistein), vitamin E (α-tocopherol), raffinose, and stachyose.

MON 87705 soybeans are expected to be compositionally equivalent to conventional soybeans, except for the intended changes in their fatty acid composition brought about by the suppression of FAT B and FAD 2 enzymes. In all, 67 different biochemical components (seven in forage and 60 in seed) were measured. Of the evaluated components, 17 fatty acids had more than 50% of the observations below the assay limit of quantitation (LOQ) and, as a result, were excluded from the statistical analysis. Therefore, statistics were provided for 50 components (seven in forage and 43 in seed).

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Abstract continued:

Examination of the overall data set confirmed that the fatty acid composition had changed as intended and that all other analyte results were similar to values reported for conventional soybean.

Six sets of statistical comparisons were conducted comparing MON 87705 to the conventional control, five based on the data from each of the replicated field sites and one based on data from a combination of all five field sites, referred to as the combined site. Significant differences were determined at the 5% level of significance ($p < 0.05$). For those comparisons in which the test was significantly different from the control, the mean test value was compared to the 99% tolerance interval calculated from the reference substances, and/or to the range of literature values for conventional soybean in order to determine if the value was within the population of conventional soybean.

The overall data set was examined for evidence of biologically meaningful changes using a mixed model analysis of variance. Statistical analysis of the composition of forage and seed from the combined site showed that for 39 (78%) of the 50 comparisons made between MON 87705 and the control, mean component values were not statistically significantly different ($p \geq 0.05$). For the 11 observed differences between test and control, all component values fell within the 99% tolerance intervals or within the range of published values for conventional soybean, with the exception of the three fatty acids that were intentionally changed, 16:0 palmitic, 18:0 stearic, and 18:1 oleic acids, and 18:2 linoleic acid, which was an expected change. Although stearic acid (18:0) was intentionally decreased, and was observed to be significantly different between the test and control, the level of stearic acid in the seed fell within the 99% tolerance interval and the difference was not regarded as biologically meaningful from a food and feed safety or nutritional perspective.

Statistical analysis of the individual site data showed that for 197 (79.2%) of 250 comparisons made between MON 87705 and the control, mean component values were not statistically significantly different ($p \geq 0.05$). Of the 53 observed differences between test and control, 33 component values fell within the 99% tolerance intervals, and were not consistently observed across sites, and therefore, not regarded as biologically meaningful from a food and feed safety or nutritional perspective. The 20 components that did not fall within the 99% tolerance intervals were fatty acids. For 20:2 eicosenoic acid, three of the five individual site test values and the combined site value fell within published values for conventional soybean, and the difference was not considered biologically relevant. The remaining 15 differences observed in the individual sites analyses which did not fall within the 99% tolerance interval were fatty acids that were intended or expected changes, and were observed both in the combined site analysis and consistently across the individual site analyses. Except as noted herein, the mean test values for all other components were also comparable to the published scientific literature and to the International Life Sciences Institute (ILSI) Crop Composition Database, further supporting the conclusion that, except for intended or expected changes in seed fatty acid levels, soybean forage and seed produced from MON 87705 are compositionally equivalent to conventional soybean.

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Study Title

**Composition Analyses of Forage and Seed Collected from MON 87705 Produced in
Chile during the 2007-2008 Growing Season**

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Study Completed On

April 1, 2009

Sponsor and Performing Laboratories

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Laboratory Project ID

**MSL0021756
Monsanto Study No. REG-08-265
Covance Study No. 6103-759**

The text below applies only to use of the data by the United States Environmental Protection Agency (U.S. EPA) in connection with the provisions of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

The inclusion of this page in all studies is for quality assurance purposes and does not necessarily indicate that this study has been submitted to the U.S. EPA.

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No claim of data confidentiality is made for any information contained in this study on the basis of its falling within the scope of FIFRA § 10(d)(1)(A), (B), or (C).

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Statement of Compliance

This study meets the U.S. EPA Good Laboratory Practice requirements as specified in 40 CFR Part 160 with the following exceptions:

- The reference standards used for compositional analysis were not listed in the protocol or characterized according to GLP standards and reserve samples from each batch of the reference standards were not retained. These exceptions had no effect on the integrity or quality of the study because the reference standards were accompanied by Certificates of Analysis.
- Stability of the compositional components in the test, control, and reference substances was not determined. This exception had no effect on the integrity or quality of the study because the samples were maintained at approximately -20°C throughout the duration of the study.

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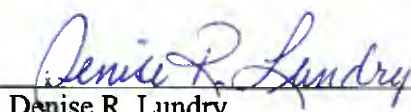
Date



03-31-09

Regulatory Pipeline Manager
Daniel J. Jenkins
Sponsor Representative

Date



Denise R. Lundry
Study Director

04-01-2009

Date

Quality Assurance Statement

Study Title: Composition Analyses of Forage and Seed Collected from
MON 87705 Produced in Chile during the 2007-2008 Growing
Season

Study Number: REG-08-265

Reviews conducted by the Quality Assurance Unit confirm that the final report for study REG-08-256 reflects the raw data for the portion of the study conducted by Monsanto Company.

Reviews that have been conducted by Covance Laboratories Inc. are enclosed within the Covance Analytical Sub-report and are specified on their individual QA Statement.

Following is a list of reviews conducted by the Monsanto Regulatory Quality Assurance Unit on study REG-08-265.

Dates of Inspection / Audit	Phase	Date Reported To:	
		Study Director	Management
03/10/2009	Raw Data and Draft Report Review	03/17/2009	03/17/2009
03/10/2009	Statistical Data and Draft Report Review	03/18/2009	03/18/2009

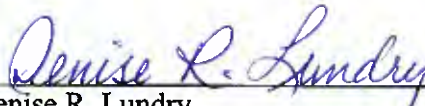
Patricia Thomas
Quality Assurance Unit
Monsanto Regulatory, Monsanto Company

03-31-09
Date

Study Certification

This report is an accurate and complete representation of the study/project activities.

Signature of Final Report Approval:



Denise R. Lundry
Study Director

04-01-2009

Date

Study Information

Study Number: REG-08-265

Study Title: Composition Analyses of Forage and Seed Collected from MON 87705 Produced in Chile during the 2007-2008 Growing Season

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Sponsor Representative: Daniel J. Jenkins

Principal Investigators: Kathleen D. Miller (Covance Laboratories Inc.)
Roy D. Sorbet (Certus International, Inc.)

Contributor: Susan G. Riordan (Statistics Technology Center)

Study Initiation Date: August 8, 2008

Report Completion Date: April 1, 2009

Records Retention: All study specific raw data, protocols, final reports, and facility records will be retained at Monsanto Company except for analytical raw data and facility records maintained at Covance.

Sample Storage: Any unused study samples will be stored at Covance until their final disposition is directed by the Study Director at a future date.

Study Information (continued)

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Abbreviations

AA	amino acid
ADF	acid detergent fiber
DW or dw	dry weight
EPSPS	5-enolpyruvylshikimate-3-phosphate synthase
FA	fatty acid
FW or fw	fresh weight
GLP	good laboratory practice
H.U.	hemagglutinating units
ILSI	International Life Sciences Institute
LOQ	limit of quantitation
NDF	neutral detergent fiber
PCR	polymerase chain reaction
PRESS	predicted residual sums of squares
QAU	quality assurance unit
SOP	standard operating procedure
TIU	trypsin inhibitor units
T/C/R	test/control/reference

1.0 Summary

Monsanto Company has developed biotechnology-derived soybean, MON 87705, to generate nutritionally-improved soybean oil with decreased levels of saturated fats (16:0 palmitic acid and 18:0 stearic acid) and increased levels of oleic acid (18:1) through suppression of FAD 2 and FAT B, two key enzymes in the fatty acid biosynthetic pathway. Suppression of these enzymes has been demonstrated to decrease saturated fatty acids and increase oleic acid in the resulting oil (Lightner, J. *et al.*, 2002; Hitz, W. *et al.*, 1999). This oil also has enhanced stability, an improved nutritional profile, and better food functionality. MON 87705 also contains the 5-enolpyruvylshikimate-3-phosphate protein from *Agrobacterium* sp. strain CP4 (CP4 EPSPS) that confers glyphosate tolerance to Roundup^{®1} herbicide. MON 87705 soybean are considered compositionally equivalent to conventional soybean except for the intended fatty acid changes.

The purpose of this study was to evaluate the composition of MON 87705 compared to a conventional control that has a genetic background similar to the test substance, but does not contain nor express the decreased saturate trait, the increased oleic trait or the herbicide tolerance trait. In this study, composition analyses of the test and control substances were conducted on forage and seed collected from a Chile field trial during 2007/2008 under the terms of Production Plan REG-07-170. Nineteen commercial conventional soybean varieties were included as reference substances to provide data for the development of a 99% tolerance interval for each component analyzed. The test and control substances were grown in replicated plots at each of five Chile sites [Quilapilun, Chacabuco (QUI); Melipilla, Melipilla (MEL); Calera de Tango, Maipo (CdT); Rancagua, Cachapoal (RAN); San Fernando, Colchagua (SFR)]. Composition analyses of the forage and seed samples included proximates (ash, fat, moisture, and protein), carbohydrates by calculation, acid detergent fiber (ADF), and neutral detergent fiber (NDF). Seed samples were further analyzed for levels of amino acids, fatty acids (C8-C24), trypsin inhibitors, phytic acid, lectin, isoflavones (daidzein, glycitein, and genistein), vitamin E (α -tocopherol), raffinose, and stachyose.

MON 87705 soybeans are expected to be compositionally equivalent to conventional soybeans, except for the intended changes in their fatty acid composition brought about by the suppression of FAT B and FAD 2 enzymes. In all, 67 different biochemical components (seven in forage and 60 in seed) were measured. Of the evaluated components, 17 fatty acids had more than 50% of the observations below the assay limit of quantitation (LOQ) and, as a result, were excluded from the statistical analysis. Therefore, statistics were provided for 50 components (seven in forage and 43 in seed).

¹ Roundup is a registered trademark of Monsanto Technology, LLC.

Examination of the overall data set confirmed that the fatty acid composition had changed as intended and that all other analyte results were similar to values reported for conventional soybean. Six sets of statistical comparisons were conducted comparing MON 87705 to the conventional control, five based on the data from each of the replicated field sites and one based on data from a combination of all five field sites, referred to as the combined site. Significant differences were determined at the 5% level of significance ($p < 0.05$). For those comparisons in which the test was significantly different from the control, the mean test value was compared to the 99% tolerance interval calculated from the reference substances, and/or to the range of literature values for conventional soybean in order to determine if the value was within the population of conventional soybean.

The overall data set was examined for evidence of biologically meaningful changes using a mixed model analysis of variance. Statistical analysis of the composition of forage and seed from the combined site showed that for 39 (78%) of the 50 comparisons made between MON 87705 and the control, mean component values were not statistically significantly different ($p \geq 0.05$). For the 11 observed differences between test and control, all component values fell within the 99% tolerance intervals or within the range of published values for conventional soybean, with the exception of the three fatty acids that were intentionally changed, 16:0 palmitic, 18:0 stearic, and 18:1 oleic acids, and 18:2 linoleic acid, which was an expected change. Although stearic acid (18:0) was intentionally decreased, and was observed to be significantly different between the test and control, the level of stearic acid in the seed fell within the 99% tolerance interval and the difference was not regarded as biologically meaningful from a food and feed safety or nutritional perspective.

Statistical analysis of the individual site data showed that for 197 (79.2%) of 250 comparisons made between MON 87705 and the control, mean component values were not statistically significantly different ($p \geq 0.05$). Of the 53 observed differences between test and control, 33 component values fell within the 99% tolerance intervals, and were not consistently observed across sites, and therefore, not regarded as biologically meaningful from a food and feed safety or nutritional perspective. The 20 components that did not fall within the 99% tolerance intervals were fatty acids. For 20:2 eicosenoic acid, three of the five individual site test values and the combined site value fell within published values for conventional soybean, and the difference was not considered biologically relevant. The remaining 15 differences observed in the individual sites analyses which did not fall within the 99% tolerance interval were fatty acids that were intended or expected changes, and were observed both in the combined site analysis and consistently across the individual site analyses. Except as noted herein, the mean test values for all other components were also comparable to the published scientific literature and to the International Life Sciences Institute (ILSI) Crop Composition Database, further supporting the conclusion that, except for intended or expected changes in seed

fatty acid levels, soybean forage and seed produced from MON 87705 are compositionally equivalent to conventional soybean.

2.0 Introduction

Monsanto Company has developed biotechnology-derived soybean, MON 87705, to generate nutritionally-improved soybean oil with decreased levels of saturated fats (16:0 palmitic acid and 18:0 stearic acid) and increased levels of oleic acid (18:1) through suppression of FAD 2 and FAT B, two key enzymes in the fatty acid biosynthetic pathway. Suppression of these enzymes has been demonstrated to decrease saturated fatty acids and increase oleic acid in the resulting oil (Lightner, J. *et al.*, 2002; Hitz, W. *et al.*, 1999). This oil also has enhanced stability, an improved nutritional profile, and better food functionality. MON 87705 also contains the 5-enolpyruvylshikimate-3-phosphate protein from *Agrobacterium* sp. strain CP4 (CP4 EPSPS) that confers glyphosate tolerance to Roundup herbicide.

3.0 Purpose

The purpose of this study was to evaluate the composition of MON 87705 (test substance) compared to a conventional control (A3525) that has a genetic background similar to the test substance, but does not contain nor express the decreased saturate trait, the increased oleic trait or the herbicide tolerance trait. Nineteen commercial conventional soybean varieties were included as reference substances to provide data for the development of a 99% tolerance interval for each component analyzed. Composition analyses were conducted on forage and seed collected from the test substance, control substance, and nineteen unique commercial conventional reference varieties grown in a 2007/2008 Chile field production under the terms of Production Plan REG-07-170.

4.0 Test, Control, and Reference (T/C/R) Substances

4.1 Test Substance

The test substance was MON 87705. Forage and seed were evaluated in this study.

Material Name	Seed Lot Number
MON 87705	GLP-0702-18254-S

4.2 Control Substance

The control substance was A3525, a conventional variety that has a similar genetic background to the test substance but lacks the introduced genes. Forage and seed were evaluated in this study.

Material Name	Seed Lot Number
A3525	GLP-0702-18252-S

4.3 Reference Substances

The reference substances were commercial conventional soybean varieties. Twenty different varieties were grown at a total of five field sites. All replicates of one reference substance from one individual site were lost during production due to freeze damage. Forage and seed from the remaining nineteen reference substances were evaluated in this study.

Material Name	Seed Lot Number	Site Code
A2869	GLP-0707-18806-S	SFR
Stine 2788	GLP-0707-18832-S	SFR
A3244	GLP-0707-18807-S	SFR
Hoegemeyer 333	GLP-0707-18823-S	SFR
NK 32Z3	GLP-0707-18827-S	CdT
Stine 3300-0	GLP-0707-18833-S	CdT
Channel Bio 3461	GLP-0707-18816-S	CdT
Stewart 3454	GLP-0707-18831-S	CdT
Croplan 3596STS	GLP-0707-18818-S	MEL
Garst 3585N	GLP-0707-18820-S	MEL
Pioneer 93B52	GLP-0707-18829-S	MEL
Quality Plus 365C	GLP-0707-18830-S	MEL
Stine 3600-0	GLP-0707-18834-S	QUI
Channel Bio 37002	GLP-0707-18817-S	QUI
Lewis 372	GLP-0707-18825-S	QUI
Pioneer 93B82	GLP-0707-18828-S	QUI
Lewis 391	GLP-0707-18826-S	RAN
Stine 3870-0	GLP-0707-18835-S	RAN
A4324	GLP-0707-18809-S	RAN

4.4 T/C/R Substance Characterization

The identities of the forage and seed samples from test, control, and reference substances were verified by the Study Director prior to their use in the study by confirming the chain-of-custody documentation supplied with the forage and seed collected from the field plots. The seed of the test, control, and reference substances was also characterized by event-specific polymerase chain reaction (PCR) analysis, for the presence or absence of the inserted DNA. The identity of all seed samples from the test substance was confirmed as MON 87705. All seed samples from the control and reference substances were confirmed not to contain the biotech events found in MON 87705. Based on PCR results, all tested samples were deemed acceptable for use in this study. Characterization data were archived at Monsanto Company.

5.0 Field Trial Description

Forage and seed of the test, control, and reference substances were collected from five replicated field sites in Chile as detailed in Production Plan REG-07-170 (Rowland, 2009). Locations of the field sites were as follows: Quilapilun, Chacabuco Province (QUI); Melipilla, Melipilla Province (MEL); Calera de Tango, Maipo Province (CdT); Rancagua, Cachapoal Province (RAN); and San Fernando, Colchagua Province (SFR). Seeds were planted in a randomized complete block design with three replicates per block for each test, control, and reference substance. Samples from all three replicates of test, control, and reference plots were analyzed with the exception of a single replicate of the control substance from site QUI, which was lost. All replicates of the reference substance UA 4805 from site RAN were damaged by an early frost, and were excluded from this study. All T/C/R samples were grown under normal agronomic field conditions for their respective geographic regions.

Forage and seed samples were harvested from all plots and shipped on dry ice (forage) or ambient temperature (seed) to Monsanto Company, St. Louis, MO. A sub-sample for composition analysis was obtained from each tissue sample collected. These sub-samples were then ground and stored in a freezer set to maintain a temperature of -20°C until their shipment on dry ice to Covance Laboratories Inc. (Madison, WI) for analysis. The label on the samples shipped contained the study number, sample/tissue type, crop type, material name, unique sample ID number, seed lot number, site, plot number, production plan number, container type, contact name, and storage conditions.

6.0 Analytical Methods

A total of 86 forage and 86 seed samples were analyzed by Covance Laboratories Inc. Forage samples were analyzed for proximates (ash, fat, moisture, and protein), carbohydrates by calculation, acid detergent fiber (ADF), and neutral detergent fiber

(NDF). Seed samples were analyzed for proximates (ash, fat, moisture, and protein), carbohydrates by calculation, acid detergent fiber (ADF), neutral detergent fiber (NDF), amino acids, fatty acids (C8-C24), trypsin inhibitors, phytic acid, lectin, isoflavones (daidzein, glycitein, and genistein), vitamin E (α -tocopherol), raffinose, and stachyose. Each analysis was based on published methods that were approved by the Study Director. The analytical data generated by Covance Laboratories Inc., including a summary of the methods used, Covance SOP or method mnemonics, literature references, limits of quantitation, and the reference standards used can be found in the analytical sub-report in Appendix 1 (Covance Laboratories Inc. study number 6103-759).

7.0 Control of Bias

Samples were analyzed in the order specified by a computer-generated randomized list. The Study Director generated the randomized sample list and forwarded it to Covance Laboratories Inc. prior to analysis.

8.0 Statistical Analysis

8.1 Data Processing

After composition analyses were performed at Covance, data spreadsheets were forwarded to Monsanto Company. The data were reviewed, formatted, and sent to Certus International, Inc. for statistical analysis. A statistical sub-report was generated by Certus International, Inc. and sent to Monsanto Company (see Appendix 2).

The following formulas were used for re-expression of composition data for statistical analysis:

Component	From (X)	To	Formula ¹
Proximates (excluding Moisture), Fiber, Phytic Acid, Raffinose, Stachyose	% FW	% DW	X/d
Amino Acids (AA)	mg/g FW	% DW	X/(10d)
Isoflavones	μ g/g FW	μ g/g DW	X/d
Trypsin Inhibitor	TIU/mg FW	TIU/mg DW	X/d
Vitamin E	mg/100g FW	mg/100g DW	X/d
Lectin	H.U./mg FW	H.U./mg DW	X/d
Fatty Acids (FA)	% FW	% Total FA	$(100)X_j/\Sigma X$, for each FA _j where ΣX is over all the FA

Component	From (X)	To	Formula ¹
¹ 'X' is the individual sample value; 'd' is the fraction of the sample that is dry matter.			

In order to complete a statistical analysis for a compositional component in this study, at least 50% of the values for a component had to be greater than the assay limit of quantitation (LOQ). Components with more than 50% of observations below the assay LOQ were excluded from summaries and analysis. The following 17 components with more than 50% of the observations below the assay LOQ were excluded: 8:0 caprylic acid, 10:0 capric acid, 12:0 lauric acid, 14:0 myristic acid, 14:1 myristoleic acid, 15:0 pentadecylic acid, 15:1 10c pentadecenoic acid, 16:1 palmitoleic acid, 17:0 heptadecanoic acid, 17:1 9c heptadecenoic acid, 18:1 9t octadecenoic acid, 18:2 9c,15c octadecadienoic acid, 18:2 6c,9c octadecadienoic acid, 18:3 gamma linolenic acid, 20:2 11c,14c eicosadienoic acid, 20:3 11c,14c,17c eicosatrienoic acid, and 20:4 arachidonic acid.

If less than 50% of the observations for a component were below the LOQ, individual analyses that were below the LOQ were assigned a value equal to half the LOQ. In this study 13 values for 24:0 Lignoceric acid were assigned, as is presented in Listing 2 of the Statistical Sub-Report (Appendix 2).

PRESS residuals were used to identify outliers. A PRESS residual is the difference between any value and its predicted value from a statistical model that excludes the data point. The studentized version scales these residuals so that the values tend to have a standard normal distribution when outliers are absent. Thus, most values are expected to be between ± 3 . Extreme data points that are also outside of the ± 6 studentized PRESS residual range are considered for exclusion, as outliers, from the final analyses. No results had PRESS residual values outside of the ± 6 range, for this study.

8.2 Statistical Methodology

All soybean components were statistically analyzed using a mixed model analysis of variance. The five replicated sites were analyzed both separately and combined. Individual replicated site analyses used model (1).

$$(1) \quad Y_{ij} = U + T_i + B_j + e_{ij},$$

where Y_{ij} = unique individual observation, U = overall mean, T_i = substance effect, B_j = random block effect, and e_{ij} = residual error.

Combined site analyses used model (2).

$$(2) \quad Y_{ijk} = U + T_i + L_j + B(L)_{jk} + LT_{ij} + e_{ijk},$$

where Y_{ijk} = unique individual observation, U = overall mean, T_i = substance effect, L_j = random location effect, $B(L)_{jk}$ = random block within location effect, LT_{ij} = random location by substance interaction effect, and e_{ijk} = residual error.

For each compositional component, 99% tolerance intervals were calculated. A tolerance interval is an interval that one can claim, with a specified degree of confidence, contains at least a specified proportion, p , of an entire sampled population for the parameter measured. The calculated tolerance intervals in this study are expected to contain, with 95% confidence, 99% of the quantities expressed in the population of conventional soybean. Each tolerance interval estimate was based upon the average of three observations per unique reference substance. Because negative quantities are not possible, negative calculated lower tolerance bounds were set to zero.

SAS[®] software was used to generate all summary statistics and perform all analyses. Report tables present p-values from SAS as either <0.001 or the actual value truncated to three decimal places.

9.0 Results and Discussion

The composition of forage and seed of MON 87705 was analyzed and statistically compared to the conventional control, A3525. Tolerance intervals calculated from the conventional reference substances were also established for each compositional component. Sixty-seven components (seven in forage and 60 in seed) were evaluated to determine the compositional profile of the T/C/R substances. The composition analysis data for the T/C/R substances can be found in Appendix 1.

Each individual component for the test substance was compared to that of the conventional control for the five field sites and for the combination of all five sites (combined site). Of the 67 components, 17 fatty acids had greater than 50% of the analytical values that were below the limit of quantitation. These components were not included in the statistical analyses.

Examination of the overall data set confirmed that the fatty acid composition had been improved as intended and that all other analyte results were as expected. Least square means, standard errors, and the range of observed values for the test and control substances are presented in Appendix 2. Each mean test value that had a significant difference from the control ($p < 0.05$) was compared to the 99% tolerance interval generated from the conventional reference substances in this study. The summary of significant differences ($p < 0.05$) for MON 87705 can be found in Table 1. Table 2

[®] SAS is a registered trademark of SAS Institute Inc.

presents the range of values obtained from the published scientific literature and the International Life Sciences Institute (ILSI) Crop Composition Database (ILSI, 2006). Statistical analysis of the compositional data showed that there were no significant differences ($p \geq 0.05$) for 39 (78%) of the 50 comparisons made by combined site analysis between the mean component values of MON 87705 and the control. Of the 11 components from the combined site analysis that were significantly different, eight component test values (forage ash, and seed arginine, cystine, total fat, 18:0 stearic, 18:3 linolenic acid, 20:0 arachidic acid, and 20:1 eicosenoic acid) were within the calculated 99% tolerance interval and/or within ILSI Crop Composition Database for the population of conventional soybean references, and the differences were not considered biologically relevant from a food and feed safety or nutritional perspective. Two of the three remaining differences were seed fatty acids that were intentionally changed in MON 87705 (16:0 palmitic and 18:1 oleic). The observed difference for 18:2 linoleic acid was an expected change associated with the suppression of the FAD 2 enzyme. Stearic acid (18:0) was also intentionally decreased, and was observed to be significantly different between the test and control, however, the relative magnitude of the difference was small (26.39%) compared to other intended differences (78.18 – 235.20%), and the level of stearic acid in the seed fell within the 99% tolerance interval. Overall, the combined site results support the conclusion that, except for intended or expected changes in seed fatty acid levels soybean forage and seed produced from MON 87705 are compositionally equivalent to conventional soybean.

Statistical analysis of the individual site data showed that for 197 (78.8%) of 250 comparisons made between MON 87705 and the control, mean component values were not statistically significantly different ($p \geq 0.05$). Of the 53 observed differences between test and control, 33 component values fell within the 99% tolerance intervals, and were not consistently observed across sites, with the exception of 18:0 stearic acid, which was observed across all sites, and was an intended change. The component values that fell within the 99% tolerance interval, but were not consistently observed across sites, were comparable to values published in scientific literature and the ILSI Crop Composition Database, further supporting the conclusion that the differences did not reflect meaningful trends and were of no biological significance. The remaining 20 statistical differences observed in the individual sites analyses were comprised of 15 fatty acid values that were intentionally changed to obtain the improved fatty acid profile, and five values for 20:1 eicosenoic acid. These component differences were observed both in the combined site analysis and consistently across the individual site analyses. However, because the combined site value and three of the five individual site test values for 20:1 eicosenoic acid fell within published values for conventional soybean, and the differences were not consistently observed across all sites, the differences for 20:1 eicosenoic acid were not considered biologically meaningful. Overall, the individual site results support the combined site results that, except for intended or expected changes in seed fatty acid levels for 16:0 palmitic, 18:0 stearic, 18:1 oleic, and 18:2 linoleic, soybean forage and

seed produced from MON 87705 are compositionally equivalent to conventional soybean.

10.0 Conclusions

Through suppression of the FAD 2 and FAT B enzymes, the fatty acid composition of MON 87705 has been intentionally altered to produce a low saturate, high oleic soybean. Composition analyses of seed and forage from MON 87705 and a conventional control confirmed that there are no biologically meaningful differences for proximates, fiber, amino acids, vitamins, isoflavones and anti-nutrients when the test substance, MON 87705, was compared to the conventional control soybean substance, A3525. Except for the intended or expected changes in seed fatty acid levels for 16:0 palmitic, 18:0 stearic, 18:1 oleic, and 18:2 linoleic, soybean forage and seed produced from MON 87705 are compositionally equivalent to conventional soybean.

11.0 References

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12.0 Protocol Amendments/Deviations

There were three protocol amendments in this study.

- When final PCR results were reviewed it was determined that one reference substance (UA 4805; RAN site) was missing from the PCR analysis. The seed sample was lost to freeze damage, and no sample was received in St. Louis. Since no seed existed for this sample, the forage sample was removed from the study. The remaining 19 reference seed and forage samples were used to develop the 99% tolerance intervals.
- The control forage sample for rep 1 at the QUI site was lost during -80 °C storage at the St. Louis, MO Sample Management facility. This sample could not be processed or shipped for analysis. The corresponding control seed sample for rep 1 at QUI site was removed from shipment for consistency. Two replicates of control seed and forage were still available for analysis at this site.
- The name of the test substance was encrypted in the production plan and on the sample labels. This encryption (PV-GMPQ/HT4404) was added to the protocol to link the test substance name in the production plan and on sample labels to the test substance name in the protocol and final report.
- This study originally stated that one of the three replicates of reference substance at each site would be analyzed. The other two replicates of each unique reference substance produced in REG-07-170 were added for business reasons.

These changes had no negative impact on the study.

There were no protocol deviations in this study

Table 1. Summary of Differences (p<0.05) for the Comparison of Soybean Component Levels for Test (MON 87705) vs. the Conventional Control (A3525) and Commercial Reference Substances

Component (Units) ¹	Mean Difference (Test minus Control)				Test Range	Commercial Tolerance Interval ²
	MON 87705 Mean	A3525 Mean	Mean Difference (% of A3525)	Significance (p-Value)		
Statistical Differences Observed in Combined-Site Analysis						
Forage Proximate						
Ash (% DW)	8.75	8.18	6.99	0.020	[7.39 - 10.11]	[6.78, 9.91]
Seed Amino Acid						
Arginine (% DW)	2.78	2.68	3.74	0.048	[2.43 - 3.16]	[1.81, 3.62]
Cystine (% DW)	0.61	0.59	3.66	0.043	[0.57 - 0.64]	[0.49, 0.69]
Seed Fatty Acid						
16:0 Palmitic (% Total FA)	2.36	10.83	-78.18	<0.001	[2.25 - 2.44]	[7.62, 12.55]
18:0 Stearic (% Total FA)	3.31	4.50	-26.39	<0.001	[3.07 - 3.82]	[2.87, 7.15]
18:1 Oleic (% Total FA)	76.47	22.81	235.20	<0.001	[73.13 - 79.17]	[18.40, 30.22]
18:2 Linoleic (% Total FA)	10.10	52.86	-80.90	<0.001	[7.85 - 12.42]	[47.75, 56.46]

Table 1. Summary of Differences (p<0.05) for the Comparison of Soybean Component Levels for Test (MON 87705) vs. the Conventional Control (A3525) and Commercial Reference Substances (cont.)

Component (Units) ¹	Mean Difference (Test minus Control)					Test Range	Commercial Tolerance Interval ²
	MON 87705 Mean	A3525 Mean	Mean				
			Difference (% of A3525)	Significance (p-Value)			
Statistical Differences Observed in Combined-Site Analysis							
Seed Fatty Acid							
18:3 Linolenic (% Total FA)	6.69	8.02	-16.59	<0.001	[5.55 - 7.81]	[4.97, 9.93]	
20:0 Arachidic (% Total FA)	0.30	0.34	-11.72	0.005	[0.28 - 0.36]	[0.22, 0.53]	
20:1 Eicosenoic (% Total FA)	0.34	0.19	79.85	<0.001	[0.27 - 0.40]	[0.13, 0.25]	
Seed Proximate							
Total Fat (% DW)	18.29	19.33	-5.38	<0.001	[16.55 - 19.50]	[15.35, 25.95]	
Statistical Differences Observed in More than One Individual Site							
Seed Fatty Acid							
16:0 Palmitic (% Total FA) Site CdT	2.31	10.80	-78.62	<0.001	[2.29 - 2.32]	[7.62, 12.55]	
16:0 Palmitic (% Total FA) Site MEL	2.39	10.83	-77.92	<0.001	[2.35 - 2.42]		
16:0 Palmitic (% Total FA) Site QUI	2.30	10.56	-78.24	0.005	[2.25 - 2.37]		

Table 1. Summary of Differences (p<0.05) for the Comparison of Soybean Component Levels for Test (MON 87705) vs. the Conventional Control (A3525) and Commercial Reference Substances (cont.)

Component (Units) ¹	MON 87705 Mean	A3525 Mean	Mean Difference (Test minus Control)			Test Range	Commercial Tolerance Interval ²
			Mean	Difference	Significance		
				(% of A3525)	(p-Value)		
Statistical Differences Observed in More than One Individual Site							
Seed Fatty Acid							
16:0 Palmitic (% Total FA) Site RAN	2.40	10.96	-78.12	<0.001	[2.39 - 2.40]	[7.62, 12.55]	
16:0 Palmitic (% Total FA) Site SFR	2.42	11.00	-78.00	<0.001	[2.40 - 2.44]		
18:0 Stearic (% Total FA) Site CdT	3.17	4.58	-30.88	<0.001	[3.09 - 3.23]	[2.87, 7.15]	
18:0 Stearic (% Total FA) Site MEL	3.33	4.39	-24.06	0.018	[3.20 - 3.47]		
18:0 Stearic (% Total FA) Site QUI	3.51	4.82	-27.20	0.004	[3.15 - 3.82]		
18:0 Stearic (% Total FA) Site RAN	3.34	4.50	-25.73	0.001	[3.28 - 3.41]		
18:0 Stearic (% Total FA) Site SFR	3.22	4.31	-25.26	0.001	[3.07 - 3.41]		

Table 1. Summary of Differences (p<0.05) for the Comparison of Soybean Component Levels for Test (MON 87705) vs. the Conventional Control (A3525) and Commercial Reference Substances (cont.)

Component (Units) ¹	MON 87705 Mean	A3525 Mean	Mean Difference (Test minus Control)			Test Range	Commercial Tolerance Interval ²
			Mean	Difference (% of A3525)	Significance (p-Value)		
			Statistical Differences Observed in More than One Individual Site				
Seed Fatty Acid							
18:1 Oleic (% Total FA) Site CdT	76.44	23.02	232.08	<0.001	[76.35 - 76.60]	[18.40, 30.22]	
18:1 Oleic (% Total FA) Site MEL	76.10	22.31	241.09	<0.001	[75.68 - 76.33]		
18:1 Oleic (% Total FA) Site QUI	78.61	24.95	215.05	0.003	[77.70 - 79.17]		
18:1 Oleic (% Total FA) Site RAN	74.69	21.53	246.87	<0.001	[73.13 - 75.98]		
18:1 Oleic (% Total FA) Site SFR	76.49	22.42	241.12	<0.001	[75.33 - 77.21]		
18:2 Linoleic (% Total FA) Site CdT	10.09	52.43	-80.75	<0.001	[9.94 - 10.22]	[47.75, 56.46]	
18:2 Linoleic (% Total FA) Site MEL	10.50	53.48	-80.38	<0.001	[10.16 - 10.92]		

Table 1. Summary of Differences (p<0.05) for the Comparison of Soybean Component Levels for Test (MON 87705) vs. the Conventional Control (A3525) and Commercial Reference Substances (cont.)

Component (Units) ¹	Mean Difference (Test minus Control)					Test Range	Commercial Tolerance Interval ²
	MON 87705 Mean	A3525 Mean	Mean				
			Difference (% of A3525)	Significance (p-Value)			
Statistical Differences Observed in More than One Individual Site							
Seed Fatty Acid							
18:2 Linoleic (% Total FA) Site QUI	8.75	51.70	-83.07	0.006	[7.85 - 10.02]		[47.75, 56.46]
18:2 Linoleic (% Total FA) Site RAN	11.32	53.73	-78.92	<0.001	[10.37 - 12.42]		
18:2 Linoleic (% Total FA) Site SFR	9.82	52.84	-81.42	<0.001	[9.33 - 10.55]		
18:3 Linolenic (% Total FA) Site CdT	6.90	8.15	-15.32	0.001	[6.85 - 6.94]		[4.97, 9.93]
18:3 Linolenic (% Total FA) Site MEL	6.58	8.00	-17.72	0.002	[6.53 - 6.65]		
18:3 Linolenic (% Total FA) Site QUI	5.64	7.02	-19.69	0.029	[5.55 - 5.71]		
18:3 Linolenic (% Total FA) Site SFR	6.98	8.49	-17.72	0.009	[6.79 - 7.26]		

Table 1. Summary of Differences (p<0.05) for the Comparison of Soybean Component Levels for Test (MON 87705) vs. the Conventional Control (A3525) and Commercial Reference Substances (cont.)

Component (Units) ¹	MON 87705 Mean	A3525 Mean	Mean Difference (Test minus Control)			Test Range	Commercial Tolerance Interval ²
			Mean	Difference (% of A3525)	Significance (p-Value)		
Statistical Differences Observed in More than One Individual Site							
Seed Fatty Acid							
20:0 Arachidic (% Total FA) Site CdT	0.29	0.35	-18.10	0.016		[0.28 - 0.29]	[0.22, 0.53]
20:0 Arachidic (% Total FA) Site MEL	0.30	0.34	-11.86	0.026		[0.29 - 0.30]	
20:0 Arachidic (% Total FA) Site QUI	0.33	0.36	-8.84	0.041		[0.30 - 0.36]	
20:0 Arachidic (% Total FA) Site RAN	0.28	0.33	-13.08	0.014		[0.28 - 0.29]	
20:0 Arachidic (% Total FA) Site SFR	0.29	0.32	-8.18	0.006		[0.29 - 0.29]	
20:1 Eicosenoic (% Total FA) Site CdT	0.36	0.21	76.81	<0.001		[0.36 - 0.38]	[0.13, 0.25]
20:1 Eicosenoic (% Total FA) Site MEL	0.35	0.20	70.85	0.001		[0.34 - 0.36]	

Table 1. Summary of Differences (p<0.05) for the Comparison of Soybean Component Levels for Test (MON 87705) vs. the Conventional Control (A3525) and Commercial Reference Substances (cont.)

Component (Units) ¹	Mean Difference (Test minus Control)					Test Range	Commercial Tolerance Interval ²
	MON 87705 Mean	A3525 Mean	Mean				
			Difference (% of A3525)	Significance (p-Value)			
Statistical Differences Observed in More than One Individual Site							
Seed Fatty Acid							
20:1 Eicosenoic (% Total FA) Site QUI	0.38	0.20	89.53	0.049	[0.37 - 0.40]	[0.13, 0.25]	
20:1 Eicosenoic (% Total FA) Site RAN	0.29	0.16	82.18	0.003	[0.27 - 0.31]		
20:1 Eicosenoic (% Total FA) Site SFR	0.33	0.18	80.72	0.005	[0.32 - 0.35]		
Seed Fiber							
Acid Detergent Fiber (% DW) Site CdT	18.23	16.27	12.10	0.049	[17.57 - 18.58]	[12.71, 19.29]	
Acid Detergent Fiber (% DW) Site RAN	16.32	13.94	17.07	0.002	[15.71 - 16.78]		
Statistical Differences Observed in One Site							
Forage Proximate							
Carbohydrates (% DW) Site RAN	69.77	72.09	-3.22	0.027	[68.94 - 71.06]	[64.45, 80.50]	
Total Fat (% DW) Site MEL	5.79	6.76	-14.29	0.030	[5.37 - 6.57]	[0, 9.74]	

Table 1. Summary of Differences (p<0.05) for the Comparison of Soybean Component Levels for Test (MON 87705) vs. the Conventional Control (A3525) and Commercial Reference Substances (cont.)

Component (Units) ¹	Mean Difference (Test minus Control)				Test Range	Commercial Tolerance Interval ²
	MON 87705 Mean	A3525 Mean	Difference (% of A3525)	Significance (p-Value)		
Statistical Differences Observed in One Site						
Seed Amino Acid						
Alanine (% DW) Site SFR	1.51	1.44	4.62	0.024	[1.49 - 1.54]	[1.25, 1.92]
Arginine (% DW) Site SFR	2.52	2.34	7.56	0.047	[2.43 - 2.64]	[1.81, 3.62]
Aspartic Acid (% DW) Site SFR	3.76	3.56	5.48	0.009	[3.67 - 3.88]	[3.02, 5.11]
Glutamic Acid (% DW) Site SFR	5.90	5.53	6.62	0.008	[5.72 - 6.12]	[4.42, 8.48]
Histidine (% DW) Site SFR	0.90	0.85	5.90	0.018	[0.88 - 0.94]	[0.74, 1.16]
Leucine (% DW) Site SFR	2.54	2.41	5.12	0.014	[2.47 - 2.61]	[2.06, 3.41]
Lysine (% DW) Site SFR	2.25	2.13	5.32	0.007	[2.19 - 2.30]	[1.87, 2.81]

Table 1. Summary of Differences (p<0.05) for the Comparison of Soybean Component Levels for Test (MON 87705) vs. the Conventional Control (A3525) and Commercial Reference Substances (cont.)

Component (Units) ¹	Mean Difference (Test minus Control)				Test Range	Commercial Tolerance Interval ²
	MON 87705 Mean	A3525 Mean	Difference (% of A3525)	Significance (p-Value)		
Statistical Differences Observed in One Site						
Seed Amino Acid						
Phenylalanine (% DW) Site SFR	1.68	1.60	4.83	0.019	[1.64 - 1.73]	[1.35, 2.31]
Proline (% DW) Site SFR	1.62	1.55	5.02	0.021	[1.59 - 1.66]	[1.29, 2.21]
Tyrosine (% DW) Site SFR	1.18	1.12	5.72	0.042	[1.17 - 1.20]	[0.99, 1.49]
Seed Fatty Acid						
24:0 Lignoceric (% Total FA) Site CdT	0.15	0.15	-3.24	0.008	[0.14 - 0.15]	[0.030, 0.26]
Seed Fiber						
Neutral Detergent Fiber (% DW) Site CdT	21.04	17.99	16.97	0.009	[20.47 - 22.18]	[12.07, 21.51]
Seed Proximate						
Carbohydrates (% DW) Site CdT	41.82	40.05	4.40	0.016	[41.62 - 42.00]	[30.78, 45.86]
Seed Vitamin						
Vitamin E (mg/100g DW) Site MEL	3.26	3.83	-15.05	0.005	[3.15 - 3.45]	[0, 7.36]

Table 1. Summary of Differences (p<0.05) for the Comparison of Soybean Component Levels for Test (MON 87705) vs. the Conventional Control (A3525) and Commercial Reference Substances (cont.)

Component (Units) ¹	MON 87705 Mean	A3525 Mean	Mean Difference (Test minus Control)		Test Range	Commercial Tolerance Interval ²
			Mean	Difference (% of A3525)		
Statistical Differences Observed in One Site						
Seed Antinutrient						
Stachyose (% DW) Site CdT	3.76	3.10	21.27	0.046	[3.55 - 4.16]	[1.96, 4.41]

¹DW = dry weight; FW = fresh weight; FA = fatty acid.

²With 95% confidence, interval contains 99% of the values expressed in the population of commercial substances. Negative limits were set to zero.

Table 2. Literature and ILSI Ranges for Components in Soybean Forage and Seed

Forage Tissue/Component¹	Literature Range²	ILSI Range³
Proximate (% dw)		
Ash	5.36 – 8.91	6.72 – 10.78
Carbohydrates	62.25 – 72.28	59.8 – 74.7
Moisture (% fw)	68.50 – 78.40	73.5 – 81.6
Protein	16.48 – 24.29	14.38 – 24.71
Total Fat	2.65 – 9.87	1.302 – 5.132
Fiber (% dw)		
Acid Detergent Fiber (ADF)	23.86 – 50.69	not available
Neutral Detergent Fiber (NDF)	19.61 – 43.70	not available
Seed Tissue Component¹	Literature Range²	ILSI Range³
Proximates (% dw)		
Ash	4.61 – 6.32	3.89 – 6.99
Carbohydrates	32.75 – 40.98	29.6 – 50.2
Moisture (% fw)	6.24 – 11.10	4.7 – 34.4
Protein	34.78 – 43.35	33.19 – 45.48
Total Fat	14.62 – 20.68	8.10 – 23.56
Fiber (% dw)		
Acid Detergent Fiber (ADF)	9.22 – 26.26	7.81 – 18.61
Neutral Detergent Fiber (NDF)	10.79 – 23.90	8.53 – 21.25
Amino Acids (% dw)		
Alanine	1.62 – 1.89	1.51-2.10
Arginine	2.57 – 3.27	2.29-3.40
Aspartic acid	4.16 – 5.02	3.81-5.12
Cystine/Cysteine	0.52 – 0.69	0.37-0.81
Glutamic acid	6.52 – 8.19	5.84-8.20
Glycine	1.59 – 1.90	1.46-2.00
Histidine	0.96 – 1.13	0.88-1.18
Isoleucine	1.59 – 2.00	1.54-2.08
Leucine	2.79 – 3.42	2.59-3.62
Lysine	2.36 – 2.77	2.29-2.84
Methionine	0.45 – 0.63	0.43-0.68
Phenylalanine	1.82 – 2.29	1.63-2.35
Proline	1.83 – 2.23	1.69-2.28
Serine	1.95 – 2.42	1.11-2.48
Threonine	1.44 – 1.71	1.14-1.86
Tryptophan	0.30 – 0.48	0.36-0.50
Tyrosine	1.27 – 1.53	1.02-1.61
Valine	1.68 – 2.09	1.60-2.20

Table 2. Literature and ILSI Ranges for Components in Soybean Forage and Seed (cont.)

Seed Tissue Component ¹	Literature Range ²	ILSI Range ³
Fatty Acids	(% dw)	(% Total FA)
8:0 Caprylic	not available	0.148 – 0.148
10:0 Capric	not available	not available
12:0 Lauric	not available	0.082 – 0.132
14:0 Myristic	not available	0.071 – 0.238
14:1 Myristoleic	not available	0.121 – 0.125
15:0 Pentadecanoic	not available	not available
15:1 Pentadecenoic	not available	not available
16:0 Palmitic	1.44 – 2.35	9.55 – 15.77
16:1 Palmitoleic	not available	0.086 – 0.194
17:0 Heptadecanoic	not available	0.085 – 0.146
17:1 Heptadecenoic	not available	0.073 – 0.087
18:0 Stearic	0.54 – 1.12	2.70 – 5.88
18:1 Oleic	2.87 – 8.82	14.3 – 32.2
18:2 Linoleic	6.48 – 11.6	42.3 – 58.8
18:3 Gamma Linolenic	not available	not available
18:3 Linolenic	0.72 – 2.16	3.00 – 12.52
20:0 Arachidic	0.04 – 0.7	0.163 – 0.482
20:1 Eicosenoic	0.026 – 0.057	0.140 – 0.350
20:2 Eicosadienoic	not available	0.077 – 0.245
20:3 Eicosatrienoic	not available	not available
20:4 Arachidonic	not available	not available
22:0 Behenic	0.044 – 0.073	0.277 – 0.595
22:1 Erucic	not available	not available
24:0 Lignoceric	0.13 – 0.24 ⁴	not available
Vitamins (mg/100g dw)		
Vitamin E	1.29 – 4.80	0.19-6.17
Anti-Nutrients		
Lectin (H.U./mg fw)	0.45 – 9.95	0.09 – 8.46
Trypsin Inhibitor (TIU/mg dw)	20.79 – 59.03	19.59 – 118.68
Phytic Acid (% dw)	0.41 – 1.92	0.63 – 1.96
Isoflavones	(µg/g dw)	(mg/kg dw)
Daidzein	224.03 – 1485.52	60.0 – 2453.5
Genistein	338.24 – 1488.89	144.3 – 2837.2
Glycitein	52.72 – 298.57	15.3 – 310.4
Bio-Actives (% dw)		
Raffinose	0.26 – 0.84	0.21 – 0.66
Stachyose	1.53 – 2.98	1.21 – 3.50

¹fw=fresh weight; dw=dry weight; H.U. = hemagglutinating unit; TIU = trypsin inhibitor unit.

²Lundry et al. (2008). ³ILSI Crop Composition Database, (2006). ⁴Padgett et al. (1996).

Conversions: % dw x 10⁴ = µg/g dw; mg/g dw x 10³ = mg/kg dw; mg/100g dw x 10 = mg/kg dw; g/100g dw x 10 = mg/g dw

Appendix 1. Covance Analytical Sub-Report

Composition Analyses of Forage and Seed Collected from MON 87705 Produced in Chile during the 2007-2008 Growing Season

The following 108 pages are the analytical sub-report
Pages 35 — 142



Final Sub-Report

Study Title	Composition Analyses of Forage and Seed Collected from MON 87705 Produced in Chile during the 2007-2008 Growing Season
Sponsor	Monsanto Company 800 North Lindbergh Blvd. St. Louis, MO 63167
Study Director	Denise R. Lundry Monsanto Company
Compositional Analysis Testing Facility	Covance Laboratories Inc. 3301 Kinsman Blvd. Madison, WI 53704
Covance Principal Investigator	Kathleen D. Miller
Monsanto Study Number	REG-08-265
Covance Study Number	6103-759
Sub-Report Issued	20 March, 2009
Page Number	1 of 108

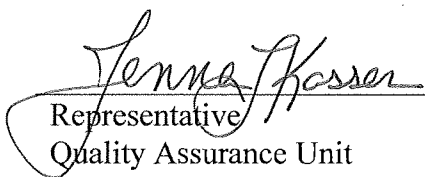
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QUALITY ASSURANCE STATEMENT

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 principal investigator (PI), study director (SD), and associated management.

Inspection Dates		Phase	Date Reported to PI and PI Management	Date Reported to SD and SD Management
From	To			
24 Oct 2008	24 Oct 2008	Analytical Chemistry	24 Oct 2008	18 Mar 2009
10 Nov 2008	11 Nov 2008	Data/Table Review	11 Nov 2008	18 Mar 2009
04 Dec 2008	11 Dec 2008	Draft Report and Data Review	11 Dec 2008	18 Mar 2009
15 Jan 2009	16 Jan 2009	Revised Draft Report Review	20 Jan 2009	18 Mar 2009


Representative
Quality Assurance Unit

20 Mar 09
Date

SIGNATURE

Kathleen D. Miller

Kathleen D. Miller
Principal Investigator
Food and Drug Analysis
Covance Laboratories Inc.

20 Mar 09

Date

STUDY IDENTIFICATION

Monsanto Study Number:

REG-08-265

Study Director:

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Study Timetable

Study Initiation Date:

08 August, 2008

Study Completion Date:

20 March, 2009

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Supervisor **Monograph**

Quality Assurance Unit

Timothy H. Valley
Manager

INTRODUCTION

The purpose of this portion of the study was to generate data for compositional analyses of soybean collected from MON 87705, a control substance, and nineteen unique reference substances.

REGULATORY COMPLIANCE

This portion of the study was conducted in accordance with the Environmental Protection Agency (EPA) Good Laboratory Practice Standards, §160.135(b) in compliance with all requirements of section 40 CFR 160 with the following exceptions:

1. Reference standards (if applicable) were not listed in the protocol but are listed in the sub-report, were not characterized according to GLP standards, and no reserve samples were retained from each batch.
2. Storage stability was not determined in this portion of the study; however, the samples were maintained at Covance at approximately -20°C throughout the study to minimize degradation.

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

MAJOR COMPUTER SYSTEMS

The major computer systems used on this study may have included, but were not limited to, the following systems:

- Balance Application (balance weight capture system)
- eNotes (official study communication)
- Waters Empower[®] Chromatography Manager (data acquisition and result calculation system)
- Laboratory Information Management System (sample and assay tracking)
- Metasys or REES (monitor and document storage conditions for test/control/reference materials and samples, if applicable)
- UV-Visible ChemStation (data acquisition)

[®]Empower is a registered trademark of Waters Corporation

TEST, CONTROL, AND REFERENCE SUBSTANCES**Test Substance**

The test substance was MON 87705. The forage and harvested seed tissues of the test substance were evaluated in this portion of the study. The test substance was identified as follows:

Material Name	Lot Number
MON 87705 (PV-GMPQ/HT4404)	GLP-0702-18254-S

Control Substance

The control substance was a conventional soybean variety, A3525. The forage and harvested seed tissues of the control substance were evaluated in this portion of the study. The control substance was identified as follows:

Material Name	Lot Number
A3525	GLP-0702-18252-S

Reference Substances

The reference substances were nineteen different conventional soybean varieties. Forage and seed of the reference substances were evaluated in this portion of the study. The reference substances were identified as follows:

Material Name	Seed Lot Number	Field Site
Asgrow A2869	GLP-0707-18806-S	SFR
Stine 2788	GLP-0707-18832-S	SFR
Asgrow A3244	GLP-0707-18807-S	SFR
Hoegemeyer 333	GLP-0707-18823-S	SFR
NK 32Z3	GLP-0707-18827-S	CdT
Stine 3300-0	GLP-0707-18833-S	CdT
Channel Bio 3461	GLP-0707-18816-S	CdT
Stewart 3454	GLP-0707-18831-S	CdT
Croplan 3596STS	GLP-0707-18818-S	MEL
Garst 3585N	GLP-0707-18820-S	MEL
Pioneer 93B52	GLP-0707-18829-S	MEL
Quality Plus 365C	GLP-0707-18830-S	MEL
Stine 3600-0	GLP-0707-18834-S	QUI
Channel Bio 37002	GLP-0707-18817-S	QUI
Lewis 372	GLP-0707-18825-S	QUI
Pioneer 93B82	GLP-0707-18828-S	QUI
Lewis 391	GLP-0707-18826-S	RAN
Stine 3870-0	GLP-0707-18835-S	RAN
Asgrow A4324	GLP-0707-18809-S	RAN

Appropriate reference standards were used in each assay for the analytical procedures or calibration of equipment. See Appendix A for reference standard identification (if applicable).

Characterization of Test, Control, and Reference Substances

Information on the characterization that defined the test/control/reference (T/C/R) was the responsibility of the Sponsor.

Storage Retention

The soybean tissues were received frozen and were stored upon receipt in a freezer set to maintain $-20 \pm 10^{\circ}\text{C}$. Reference standards were stored according to vendor specifications.

Disposition

Any remaining prepared dilutions or extractions of the tissues (if applicable) will be discarded at Covance. After the samples are analyzed, all excess tissues will be retained by Covance for one year, at which time the Sponsor will be contacted for approval to either dispose of or return the excess tissues to Monsanto. Remaining reference standards may be used for other testing.

Reserve/Retain Samples

Retain samples of the seed were the responsibility of the Sponsor.

SAFETY PRECAUTIONS

Safety precautions were taken as outlined in the Environmental, Health, and Safety section of the Covance Policies and Procedures Manual.

SAMPLE RECEIPT AND HANDLING

The samples were entered into the Covance Laboratory Information Management System (LIMS) with unique LIMS numbers. Each Monsanto sample identification was matched with the Covance LIMS information.

CONTROL OF BIAS

The samples were analyzed in a non-systematic, random order to minimize assay bias. The samples were entered into the LIMS system in a random order provided by the Study Director.

EXPERIMENTAL DESIGN

This study used approved analytical methods to determine the composition of the samples. See Appendix A for a summary of the analytical methods referenced by the method mnemonic. See Appendix B for fatty acid nomenclature.

The following analyses were performed on the forage samples:

Analyte	Method Mnemonic¹
Proximates	
Moisture	M100
Protein	PGEN
Fat	FAAH
Ash	ASHM
Acid detergent fiber	ADF
Neutral detergent fiber	NDFE

¹analytical methods are kept on file at Covance Laboratories Inc.

In addition, carbohydrate (CHO) values were estimated by calculation.

The following analyses were performed on the seed samples:

Analyte	Method Mnemonic¹
Proximates	
Moisture	M100
Protein	PGEN
Fat	FSOX
Ash	ASHM
Acid detergent fiber	ADF
Neutral detergent fiber	NDFE
Amino acids	TAA5
Fatty acid profile (C8-C24)	FALT
Trypsin Inhibitors	TRIP
Phytic acid	PHYT
Lectins	LECT
Isoflavones	ISOF
Stachyose, Raffinose	SUGT
Vitamin E (alpha-tocopherol)	LCAT

¹analytical methods are kept on file at Covance Laboratories Inc.

In addition, carbohydrate (CHO) values were estimated by calculation.

The samples were analyzed singly unless otherwise determined by Covance methods and/or SOPs. A minimum frequency of 10% quality control samples (duplicates,

recoveries, certified reference standards, blanks, or validated control samples) were prepared and analyzed at Covance. Appropriate standards were used in each assay as reference standards for the analytical procedures or calibration of equipment. Re-analyses were performed as determined by Covance methods and/or SOPs. When re-analyses were deemed necessary, documentation and justification were provided in the raw data.

STATISTICAL EVALUATIONS

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

RECORD RETENTION

All data relating to or generated by this portion of the project, including (if applicable) a copy of the protocol and amendments, a copy of the analytical sub-report, results, laboratory notebooks and any other information or records relating to this portion of the project will be retained in the archives of Covance in accordance with EPA 40 CFR Part 160. The data will be returned to Monsanto Company, upon request by the Study Director. Electronic data collected at Covance Laboratories Inc. using Empower[®] software will be stored on duplicate compact discs (CDs). One of the CDs will be stored in the archives at Covance Laboratories Inc. The second CD will be transferred to the archives at Monsanto Company in St. Louis, Missouri.

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

1. Instrument calibration and maintenance records
2. Storage temperature records
3. Training records of study personnel
4. Durable media records
5. Standard Operating Procedures
6. Standard logbooks
7. Certificates of Analysis for reference standards

RESULTS

The results for the soybean forage and seed analyses are presented in Tables 1 and 2, respectively. All of the results were on a fresh-weight basis and were deemed acceptable.

Table 1
Compositional Analyses of Soybean Forage

Sample No.	REG07170-00046	REG07170-00047	REG07170-00048
Reg. Lot Number	GLP-0702-18254-S	GLP-0702-18254-S	GLP-0702-18254-S
Material Name	MON 87705	MON 87705	MON 87705
Site Code	SFR	SFR	SFR
Plot ID	104	201	305
Covance LIMS Number	81000107	81000104	81000081
Proximate (%)			
Moisture	72.0	73.6	73.0
Protein	2.59	2.75	2.66
Total Fat	1.22	1.85	1.18
Ash	2.07	2.24	2.63
Carbohydrates	22.1	19.6	20.5
Acid Detergent Fiber (%)	11.8	7.98	8.27
Neutral Detergent Fiber (%)	10.8	9.84	10.5

Table 1
Compositional Analyses of Soybean Forage

Sample No.	REG07170-00118	REG07170-00119	REG07170-00120
Reg. Lot Number	GLP-0702-18254-S	GLP-0702-18254-S	GLP-0702-18254-S
Material Name	MON 87705	MON 87705	MON 87705
Site Code	CdT	CdT	CdT
Plot ID	101	206	306
Covance LIMS Number	81000111	81000113	81000092
Proximate (%)			
Moisture	72.5	71.5	70.6
Protein	3.59	3.96	3.84
Total Fat	1.57	1.36	1.61
Ash	2.31	2.62	2.54
Carbohydrates	20.0	20.6	21.4
Acid Detergent Fiber (%)	9.38	8.70	9.29
Neutral Detergent Fiber (%)	10.0	11.7	10.1

Table 1
Compositional Analyses of Soybean Forage

Sample No.	REG07170-00190	REG07170-00191	REG07170-00192
Reg. Lot Number	GLP-0702-18254-S	GLP-0702-18254-S	GLP-0702-18254-S
Material Name	MON 87705	MON 87705	MON 87705
Site Code	MEL	MEL	MEL
Plot ID	101	202	304
Covance LIMS Number	81000097	81000085	81000088
Proximate (%)			
Moisture	70.3	70.2	70.8
Protein	3.80	3.77	4.79
Total Fat	1.95	1.60	1.59
Ash	2.47	2.64	2.50
Carbohydrates	21.5	21.8	20.3
Acid Detergent Fiber (%)	8.86	8.73	7.06
Neutral Detergent Fiber (%)	8.21	10.6	8.60

Table 1
Compositional Analyses of Soybean Forage

Sample No.	REG07170-00262	REG07170-00263	REG07170-00264
Reg. Lot Number	GLP-0702-18254-S	GLP-0702-18254-S	GLP-0702-18254-S
Material Name	MON 87705	MON 87705	MON 87705
Site Code	QUI	QUI	QUI
Plot ID	102	204	305
Covance LIMS Number	81000108	81000096	81000086
Proximate (%)			
Moisture	72.7	71.9	70.7
Protein	4.94	4.43	4.46
Total Fat	0.626	1.63	1.45
Ash	2.19	2.39	2.42
Carbohydrates	19.5	19.7	21.0
Acid Detergent Fiber (%)	5.47	7.58	7.87
Neutral Detergent Fiber (%)	7.13	9.44	9.70

Table 1
Compositional Analyses of Soybean Forage

Sample No.	REG07170-00334	REG07170-00335	REG07170-00336
Reg. Lot Number	GLP-0702-18254-S	GLP-0702-18254-S	GLP-0702-18254-S
Material Name	MON 87705	MON 87705	MON 87705
Site Code	RAN	RAN	RAN
Plot ID	104	203	306
Covance LIMS Number	81000102	81000084	81000068
Proximate (%)			
Moisture	76.5	76.5	81.1
Protein	4.05	3.57	3.36
Total Fat	1.15	0.912	0.534
Ash	2.07	2.35	1.91
Carbohydrates	16.2	16.7	13.1
Acid Detergent Fiber (%)	7.29	7.50	6.31
Neutral Detergent Fiber (%)	9.21	9.24	8.75

Table 1
Compositional Analyses of Soybean Forage

Sample No.	REG07170-00031	REG07170-00032	REG07170-00033
Reg. Lot Number	GLP-0702-18252-S	GLP-0702-18252-S	GLP-0702-18252-S
Material Name	Asgrow A3525	Asgrow A3525	Asgrow A3525
Site Code	SFR	SFR	SFR
Plot ID	102	202	302
Covance LIMS Number	81000098	81000106	81000094
Proximate (%)			
Moisture	72.2	72.4	73.2
Protein	2.70	2.70	2.63
Total Fat	1.32	1.16	1.07
Ash	2.23	1.99	2.13
Carbohydrates	21.6	21.8	21.0
Acid Detergent Fiber (%)	9.64	11.1	10.9
Neutral Detergent Fiber (%)	11.3	12.0	12.3

Table 1
Compositional Analyses of Soybean Forage

Sample No.	REG07170-00104	REG07170-00103	REG07170-00105
Reg. Lot Number	GLP-0702-18252-S	GLP-0702-18252-S	GLP-0702-18252-S
Material Name	Asgrow A3525	Asgrow A3525	Asgrow A3525
Site Code	CdT	CdT	CdT
Plot ID	103	201	301
Covance LIMS Number	81000105	81000100	81000079
Proximate (%)			
Moisture	70.0	71.4	72.1
Protein	3.87	3.39	3.95
Total Fat	1.32	1.85	1.59
Ash	2.55	2.22	2.60
Carbohydrates	22.3	21.1	19.8
Acid Detergent Fiber (%)	9.91	8.44	5.36
Neutral Detergent Fiber (%)	10.1	9.44	9.00

Table 1
Compositional Analyses of Soybean Forage

Sample No.	REG07170-00175	REG07170-00176	REG07170-00177
Reg. Lot Number	GLP-0702-18252-S	GLP-0702-18252-S	GLP-0702-18252-S
Material Name	Asgrow A3525	Asgrow A3525	Asgrow A3525
Site Code	MEL	MEL	MEL
Plot ID	103	204	306
Covance LIMS Number	81000077	81000076	81000090
Proximate (%)			
Moisture	70.5	69.8	69.4
Protein	3.43	5.39	3.93
Total Fat	2.12	1.96	2.02
Ash	2.26	2.37	2.78
Carbohydrates	21.7	20.5	21.9
Acid Detergent Fiber (%)	9.24	7.84	7.68
Neutral Detergent Fiber (%)	9.60	9.97	9.85

Table 1
Compositional Analyses of Soybean Forage

Sample No.	REG07170-00248	REG07170-00249
Reg. Lot Number	GLP-0702-18252-S	GLP-0702-18252-S
Material Name	Asgrow A3525	Asgrow A3525
Site Code	QUI	QUI
Plot ID	202	302
Covance LIMS Number	81000115	81000101
Proximate (%)		
Moisture	72.1	72.1
Protein	4.01	4.41
Total Fat	1.49	0.938
Ash	2.02	2.37
Carbohydrates	20.4	20.2
Acid Detergent Fiber (%)	6.34	6.35
Neutral Detergent Fiber (%)	10.2	9.46

Table 1
Compositional Analyses of Soybean Forage

Sample No.	REG07170-00319	REG07170-00320	REG07170-00321
Reg. Lot Number	GLP-0702-18252-S	GLP-0702-18252-S	GLP-0702-18252-S
Material Name	Asgrow A3525	Asgrow A3525	Asgrow A3525
Site Code	RAN	RAN	RAN
Plot ID	105	205	304
Covance LIMS Number	81000099	81000112	81000078
Proximate (%)			
Moisture	75.2	77.5	73.9
Protein	3.84	3.29	3.66
Total Fat	1.21	0.911	1.32
Ash	2.15	1.89	2.25
Carbohydrates	17.6	16.4	18.9
Acid Detergent Fiber (%)	6.85	8.13	6.36
Neutral Detergent Fiber (%)	8.41	8.24	9.80

Table 1
Compositional Analyses of Soybean Forage

Sample No.	REG07170-00034	REG07170-00035	REG07170-00036
Reg. Lot Number	GLP-0707-18806-S	GLP-0707-18806-S	GLP-0707-18806-S
Material Name	Asgrow A2869	Asgrow A2869	Asgrow A2869
Site Code	SFR	SFR	SFR
Plot ID	105	204	304
Covance LIMS Number	81000103	81000235	81000239
Proximate (%)			
Moisture	72.0	71.5	71.8
Protein	3.00	3.71	2.81
Total Fat	0.883	1.96	1.38
Ash	2.61	2.24	2.11
Carbohydrates	21.5	20.6	21.9
Acid Detergent Fiber (%)	8.34	7.85	8.83
Neutral Detergent Fiber (%)	9.30	9.17	8.53

Table 1
Compositional Analyses of Soybean Forage

Sample No.	REG07170-00040	REG07170-00041	REG07170-00042
Reg. Lot Number	GLP-0707-18807-S	GLP-0707-18807-S	GLP-0707-18807-S
Material Name	Asgrow A3244 (A)	Asgrow A3244 (A)	Asgrow A3244 (A)
Site Code	SFR	SFR	SFR
Plot ID	103	206	303
Covance LIMS Number	81000083	81000219	81000216
Proximate (%)			
Moisture	71.4	76.5	73.1
Protein	2.72	2.25	3.20
Total Fat	1.26	0.672	1.20
Ash	2.34	1.98	2.18
Carbohydrates	22.3	18.6	20.3
Acid Detergent Fiber (%)	8.63	8.97	9.17
Neutral Detergent Fiber (%)	10.2	10.5	8.67

Table 1
Compositional Analyses of Soybean Forage

Sample No.	REG07170-00043	REG07170-00044	REG07170-00045
Reg. Lot Number	GLP-0707-18823-S	GLP-0707-18823-S	GLP-0707-18823-S
Material Name	Hoegemeyer 333 (A)	Hoegemeyer 333 (A)	Hoegemeyer 333 (A)
Site Code	SFR	SFR	SFR
Plot ID	106	203	306
Covance LIMS Number	81000109	81000248	81000241
Proximate (%)			
Moisture	77.1	73.3	80.6
Protein	2.22	3.07	3.16
Total Fat	1.49	1.40	0.728
Ash	1.98	1.97	1.70
Carbohydrates	17.2	20.3	13.8
Acid Detergent Fiber (%)	6.91	8.09	6.08
Neutral Detergent Fiber (%)	7.79	8.58	6.78

Table 1
Compositional Analyses of Soybean Forage

Sample No.	REG07170-00037	REG07170-00038	REG07170-00039
Reg. Lot Number	GLP-0707-18832-S	GLP-0707-18832-S	GLP-0707-18832-S
Material Name	Stine 2788 (A)	Stine 2788 (A)	Stine 2788 (A)
Site Code	SFR	SFR	SFR
Plot ID	101	205	301
Covance LIMS Number	81000110	81000222	81000223
Proximate (%)			
Moisture	73.0	65.8	72.2
Protein	3.24	6.79	2.71
Total Fat	1.50	2.81	1.19
Ash	2.33	2.77	2.14
Carbohydrates	19.9	21.8	21.8
Acid Detergent Fiber (%)	8.16	8.47	9.17
Neutral Detergent Fiber (%)	9.54	10.2	10.3

Table 1
Compositional Analyses of Soybean Forage

Sample No.	REG07170-00112	REG07170-00113	REG07170-00114
Reg. Lot Number	GLP-0707-18816-S	GLP-0707-18816-S	GLP-0707-18816-S
Material Name	Channel Bio 3461 (A)	Channel Bio 3461 (A)	Channel Bio 3461 (A)
Site Code	CdT	CdT	CdT
Plot ID	104	203	304
Covance LIMS Number	81000087	81000250	81000245
Proximate (%)			
Moisture	71.3	70.7	70.9
Protein	3.55	3.84	4.09
Total Fat	1.46	1.46	1.48
Ash	2.47	2.44	2.48
Carbohydrates	21.2	21.6	21.1
Acid Detergent Fiber (%)	8.52	9.40	8.43
Neutral Detergent Fiber (%)	9.31	10.4	8.81

Table 1
Compositional Analyses of Soybean Forage

Sample No.	REG07170-00106	REG07170-00107	REG07170-00108
Reg. Lot Number	GLP-0707-18827-S	GLP-0707-18827-S	GLP-0707-18827-S
Material Name	NK 32Z3	NK 32Z3	NK 32Z3
Site Code	CdT	CdT	CdT
Plot ID	102	205	303
Covance LIMS Number	81000080	81000238	81000220
Proximate (%)			
Moisture	71.9	71.0	71.7
Protein	4.47	5.78	3.62
Total Fat	2.16	1.44	1.82
Ash	2.39	1.96	2.35
Carbohydrates	19.1	19.8	20.5
Acid Detergent Fiber (%)	7.23	8.77	8.01
Neutral Detergent Fiber (%)	9.38	11.5	10.6

Table 1
Compositional Analyses of Soybean Forage

Sample No.	REG07170-00115	REG07170-00116	REG07170-00117
Reg. Lot Number	GLP-0707-18831-S	GLP-0707-18831-S	GLP-0707-18831-S
Material Name	Stewart 3454 (A)	Stewart 3454 (A)	Stewart 3454 (A)
Site Code	CdT	CdT	CdT
Plot ID	105	202	302
Covance LIMS Number	81000075	81000227	81000246
Proximate (%)			
Moisture	70.6	71.0	70.6
Protein	5.06	3.71	3.75
Total Fat	2.28	1.86	1.70
Ash	2.23	2.44	2.62
Carbohydrates	19.8	21.0	21.3
Acid Detergent Fiber (%)	6.91	8.71	9.27
Neutral Detergent Fiber (%)	9.97	9.86	10.5

Table 1
Compositional Analyses of Soybean Forage

Sample No.	REG07170-00109	REG07170-00110	REG07170-00111
Reg. Lot Number	GLP-0707-18833-S	GLP-0707-18833-S	GLP-0707-18833-S
Material Name	Stine 3300-0 (A)	Stine 3300-0 (A)	Stine 3300-0 (A)
Site Code	CdT	CdT	CdT
Plot ID	106	204	305
Covance LIMS Number	81000093	81000240	81000249
Proximate (%)			
Moisture	71.3	70.8	70.4
Protein	4.40	4.98	4.93
Total Fat	2.03	1.95	1.77
Ash	2.23	2.17	2.26
Carbohydrates	20.0	20.1	20.6
Acid Detergent Fiber (%)	9.02	8.52	8.90
Neutral Detergent Fiber (%)	9.54	9.38	9.00

Table 1
Compositional Analyses of Soybean Forage

Sample No.	REG07170-00178	REG07170-00179	REG07170-00180
Reg. Lot Number	GLP-0707-18818-S	GLP-0707-18818-S	GLP-0707-18818-S
Material Name	Croplan 3596STS	Croplan 3596STS	Croplan 3596STS
Site Code	MEL	MEL	MEL
Plot ID	104	203	305
Covance LIMS Number	81000070	81000251	81000218
Proximate (%)			
Moisture	71.0	71.6	72.8
Protein	4.84	3.76	3.60
Total Fat	1.55	1.62	1.46
Ash	2.24	2.79	2.83
Carbohydrates	20.4	20.2	19.3
Acid Detergent Fiber (%)	7.58	7.03	8.02
Neutral Detergent Fiber (%)	9.42	7.93	8.71

Table 1
Compositional Analyses of Soybean Forage

Sample No.	REG07170-00181	REG07170-00182	REG07170-00183
Reg. Lot Number	GLP-0707-18820-S	GLP-0707-18820-S	GLP-0707-18820-S
Material Name	Garst 3585N (A)	Garst 3585N (A)	Garst 3585N (A)
Site Code	MEL	MEL	MEL
Plot ID	106	205	303
Covance LIMS Number	81000072	81000232	81000230
Proximate (%)			
Moisture	69.4	70.1	68.7
Protein	4.43	4.11	4.13
Total Fat	1.99	1.99	1.73
Ash	2.29	2.62	2.51
Carbohydrates	21.9	21.2	22.9
Acid Detergent Fiber (%)	8.66	8.26	8.39
Neutral Detergent Fiber (%)	11.3	9.63	10.6

Table 1
Compositional Analyses of Soybean Forage

Sample No.	REG07170-00184	REG07170-00185	REG07170-00186
Reg. Lot Number	GLP-0707-18829-S	GLP-0707-18829-S	GLP-0707-18829-S
Material Name	Pioneer 93B52 (A)	Pioneer 93B52 (A)	Pioneer 93B52 (A)
Site Code	MEL	MEL	MEL
Plot ID	105	201	301
Covance LIMS Number	81000073	81000229	81000225
Proximate (%)			
Moisture	71.2	71.2	70.7
Protein	4.09	3.06	3.47
Total Fat	1.51	1.72	1.41
Ash	2.39	2.49	2.64
Carbohydrates	20.8	21.5	21.8
Acid Detergent Fiber (%)	7.58	7.98	8.53
Neutral Detergent Fiber (%)	11.1	9.60	9.91

Table 1
Compositional Analyses of Soybean Forage

Sample No.	REG07170-00187	REG07170-00188	REG07170-00189
Reg. Lot Number	GLP-0707-18830-S	GLP-0707-18830-S	GLP-0707-18830-S
Material Name	Quality Plus 365C	Quality Plus 365C	Quality Plus 365C
Site Code	MEL	MEL	MEL
Plot ID	102	206	302
Covance LIMS Number	81000089	81000243	81000226
Proximate (%)			
Moisture	69.8	69.4	69.7
Protein	4.17	4.09	3.95
Total Fat	1.65	1.36	1.54
Ash	2.50	2.59	2.58
Carbohydrates	21.9	22.6	22.2
Acid Detergent Fiber (%)	9.16	8.48	8.27
Neutral Detergent Fiber (%)	12.0	10.1	10.1

Table 1
Compositional Analyses of Soybean Forage

Sample No.	REG07170-00253	REG07170-00254	REG07170-00255
Reg. Lot Number	GLP-0707-18817-S	GLP-0707-18817-S	GLP-0707-18817-S
Material Name	Channel Bio 37002 (A)	Channel Bio 37002 (A)	Channel Bio 37002 (A)
Site Code	QUI	QUI	QUI
Plot ID	104	206	304
Covance LIMS Number	81000114	81000221	81000231
Proximate (%)			
Moisture	73.6	74.1	71.8
Protein	4.87	4.42	4.01
Total Fat	0.931	0.806	1.05
Ash	2.27	1.81	2.25
Carbohydrates	18.3	18.9	20.9
Acid Detergent Fiber (%)	7.25	8.16	8.31
Neutral Detergent Fiber (%)	9.05	9.42	9.44

Table 1
Compositional Analyses of Soybean Forage

Sample No.	REG07170-00256	REG07170-00257	REG07170-00258
Reg. Lot Number	GLP-0707-18825-S	GLP-0707-18825-S	GLP-0707-18825-S
Material Name	Lewis 372 (A)	Lewis 372 (A)	Lewis 372 (A)
Site Code	QUI	QUI	QUI
Plot ID	103	205	306
Covance LIMS Number	81000074	81000215	81000252
Proximate (%)			
Moisture	72.6	72.6	73.3
Protein	4.92	3.94	4.00
Total Fat	1.20	0.956	0.918
Ash	2.43	2.33	2.37
Carbohydrates	18.9	20.2	19.4
Acid Detergent Fiber (%)	7.40	8.65	7.82
Neutral Detergent Fiber (%)	9.84	10.5	8.45

Table 1
Compositional Analyses of Soybean Forage

Sample No.	REG07170-00259	REG07170-00260	REG07170-00261
Reg. Lot Number	GLP-0707-18828-S	GLP-0707-18828-S	GLP-0707-18828-S
Material Name	Pioneer 93B82 (A)	Pioneer 93B82 (A)	Pioneer 93B82 (A)
Site Code	QUI	QUI	QUI
Plot ID	101	201	303
Covance LIMS Number	81000091	81000247	81000236
Proximate (%)			
Moisture	73.4	72.8	73.6
Protein	4.02	4.53	4.09
Total Fat	1.05	1.00	0.793
Ash	2.43	2.44	2.30
Carbohydrates	19.1	19.2	19.2
Acid Detergent Fiber (%)	6.29	6.58	7.21
Neutral Detergent Fiber (%)	7.51	8.01	6.52

Table 1
Compositional Analyses of Soybean Forage

Sample No.	REG07170-00250	REG07170-00251	REG07170-00252
Reg. Lot Number	GLP-0707-18834-S	GLP-0707-18834-S	GLP-0707-18834-S
Material Name	Stine 3600-0 (A)	Stine 3600-0 (A)	Stine 3600-0 (A)
Site Code	QUI	QUI	QUI
Plot ID	105	203	301
Covance LIMS Number	81000095	81000228	81000233
Proximate (%)			
Moisture	72.3	72.1	72.3
Protein	4.47	4.27	4.67
Total Fat	1.87	1.43	1.72
Ash	2.39	2.09	2.36
Carbohydrates	19.0	20.1	19.0
Acid Detergent Fiber (%)	6.42	7.29	6.69
Neutral Detergent Fiber (%)	9.19	8.90	7.78

Table 1
Compositional Analyses of Soybean Forage

Sample No.	REG07170-00328	REG07170-00329	REG07170-00330
Reg. Lot Number	GLP-0707-18809-S	GLP-0707-18809-S	GLP-0707-18809-S
Material Name	Asgrow A4324	Asgrow A4324	Asgrow A4324
Site Code	RAN	RAN	RAN
Plot ID	101	204	302
Covance LIMS Number	81000069	81000244	81000224
Proximate (%)			
Moisture	77.2	75.2	76.8
Protein	4.06	3.29	2.38
Total Fat	0.820	0.589	0.276
Ash	1.86	1.88	1.84
Carbohydrates	16.1	19.0	18.7
Acid Detergent Fiber (%)	6.44	8.80	9.77
Neutral Detergent Fiber (%)	9.66	8.73	10.8

Table 1
Compositional Analyses of Soybean Forage

Sample No.	REG07170-00322	REG07170-00323	REG07170-00324
Reg. Lot Number	GLP-0707-18826-S	GLP-0707-18826-S	GLP-0707-18826-S
Material Name	Lewis 391 (A)	Lewis 391 (A)	Lewis 391 (A)
Site Code	RAN	RAN	RAN
Plot ID	106	201	301
Covance LIMS Number	81000071	81000242	81000234
Proximate (%)			
Moisture	77.8	77.1	80.0
Protein	3.89	3.87	3.31
Total Fat	0.672	0.506	0.565
Ash	1.94	1.86	1.68
Carbohydrates	15.7	16.7	14.4
Acid Detergent Fiber (%)	6.76	7.28	7.16
Neutral Detergent Fiber (%)	9.86	6.82	8.23

Table 1
Compositional Analyses of Soybean Forage

Sample No.	REG07170-00325	REG07170-00326	REG07170-00327
Reg. Lot Number	GLP-0707-18835-S	GLP-0707-18835-S	GLP-0707-18835-S
Material Name	Stine 3870-0 (A)	Stine 3870-0 (A)	Stine 3870-0 (A)
Site Code	RAN	RAN	RAN
Plot ID	103	206	305
Covance LIMS Number	81000082	81000237	81000217
Proximate (%)			
Moisture	80.0	82.0	76.0
Protein	3.40	3.24	2.76
Total Fat	0.926	0.565	0.692
Ash	1.94	1.58	1.97
Carbohydrates	13.7	12.6	18.6
Acid Detergent Fiber (%)	7.16	6.40	8.83
Neutral Detergent Fiber (%)	8.11	6.14	10.2

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00070	REG07170-00071	REG07170-00072
Reg. Lot Number	GLP-0702-18254-S	GLP-0702-18254-S	GLP-0702-18254-S
Material Name	MON 87705	MON 87705	MON 87705
Site Code	SFR	SFR	SFR
Plot ID	104	201	305
Covance LIMS Number	81000062	81000040	81000066
Proximate (%)			
Moisture	12.0	12.3	12.1
Protein	27.7	28.5	30.0
Total Fat	16.9	17.1	15.3
Ash	5.14	5.54	5.28
Carbohydrates	38.3	36.6	37.3
Acid Detergent Fiber (%)	15.0	13.9	14.9
Neutral Detergent Fiber (%)	15.8	13.7	17.3
Lectin (H.U./mg)*	2.97	0.721	2.32
Trypsin Inhibitor (TIU/mg)**	29.9	41.8	35.8
Vitamin E (mg/100g)	2.13	1.84	1.82
Phytic Acid (%)	1.61	1.62	1.78
Raffinose (%)	0.615	0.624	0.549
Stachyose (%)	3.41	3.87	3.42
Isoflavones (µg/g)			
Daidzein	2220	2250	2070
Glycitein	173	134	154
Genistein	1320	1340	1260
Amino Acids (mg/g)			
Aspartic Acid	32.3	32.7	34.1
Threonine	10.6	11.2	11.0
Serine	13.1	14.7	13.4
Glutamic Acid	50.3	51.3	53.8
Proline	14.0	14.2	14.6
Glycine	12.9	13.0	13.5
Alanine	13.1	13.2	13.5
Cystine	5.45	5.24	5.40
Valine	14.9	14.8	15.7
Methionine	4.72	4.53	4.82
Isoleucine	13.9	13.7	14.6
Leucine	21.7	22.3	22.9
Tyrosine	10.3	10.5	10.4
Phenylalanine	14.4	14.7	15.2
Lysine	19.3	19.7	20.2
Histidine	7.73	7.85	8.23
Arginine	21.4	21.8	23.2
Tryptophan	3.46	3.28	3.63

*H.U. - Hemagglutinating Unit

**TIU - Trypsin Inhibitor Unit

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00070	REG07170-00071	REG07170-00072
Reg. Lot Number	GLP-0702-18254-S	GLP-0702-18254-S	GLP-0702-18254-S
Material Name	MON 87705	MON 87705	MON 87705
Site Code	SFR	SFR	SFR
Plot ID	104	201	305
Covance LIMS Number	81000062	81000040	81000066
Fatty Acids (%)			
8:0 Caprylic	< 0.0200	< 0.0200	< 0.0200
10:0 Capric	< 0.0200	< 0.0200	< 0.0200
12:0 Lauric	< 0.0200	< 0.0200	< 0.0200
14:0 Myristic	< 0.0200	< 0.0200	< 0.0200
14:1 Myristoleic	< 0.0200	< 0.0200	< 0.0200
15:0 Pentadecylic	< 0.0200	< 0.0200	< 0.0200
15:1 10c Pentadecenoic	< 0.0200	< 0.0200	< 0.0200
16:0 Palmitic	0.389	0.400	0.353
16:1 Palmitoleic	< 0.0200	< 0.0200	< 0.0200
17:0 Heptadecanoic	< 0.0200	< 0.0200	< 0.0200
17:1 9c Heptadecenoic	< 0.0200	0.0210	< 0.0200
18:0 Stearic	0.517	0.502	0.498
18:1 9t Octadecenoic	< 0.0200	< 0.0200	< 0.0200
18:1 Oleic	12.5	12.6	11.0
18:2 6c,9c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
18:2 Linoleic	1.51	1.57	1.54
18:2 9c,15c Octadecadienoic	0.0224	0.0252	< 0.0200
20:0 Arachidic	0.0463	0.0471	0.0430
18:3 Gamma Linolenic	< 0.0200	< 0.0200	< 0.0200
20:1 Eicosenoic	0.0565	0.0541	0.0461
18:3 Linolenic	1.10	1.13	1.06
20:2 11c,14c Eicosadienoic	< 0.0200	< 0.0200	< 0.0200
22:0 Behenic	0.0477	0.0478	0.0426
20:3 11c,14c,17c Eicosatrienoic	< 0.0200	< 0.0200	< 0.0200
20:4 Arachidonic	< 0.0200	< 0.0200	< 0.0200
24:0 Lignoceric	0.0234	0.0256	0.0200

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00142	REG07170-00143	REG07170-00144
Reg. Lot Number	GLP-0702-18254-S	GLP-0702-18254-S	GLP-0702-18254-S
Material Name	MON 87705	MON 87705	MON 87705
Site Code	CdT	CdT	CdT
Plot ID	101	206	306
Covance LIMS Number	81000020	81000059	81000037
Proximate (%)			
Moisture	11.1	11.2	10.1
Protein	30.8	29.6	29.9
Total Fat	15.7	16.2	16.5
Ash	5.45	5.72	5.88
Carbohydrates	37.0	37.3	37.6
Acid Detergent Fiber (%)	16.5	15.6	16.7
Neutral Detergent Fiber (%)	18.2	19.7	18.4
Lectin (H.U./mg)*	1.78	2.46	0.908
Trypsin Inhibitor (TIU/mg)**	42.7	34.2	37.8
Vitamin E (mg/100g)	2.82	3.11	3.01
Phytic Acid (%)	1.35	1.75	1.74
Raffinose (%)	0.441	0.481	0.454
Stachyose (%)	3.70	3.18	3.19
Isoflavones (µg/g)			
Daidzein	1120	1040	1030
Glycitein	80.8	157	138
Genistein	724	724	728
Amino Acids (mg/g)			
Aspartic Acid	34.9	34.1	33.8
Threonine	11.9	11.1	11.3
Serine	16.0	14.1	15.2
Glutamic Acid	54.5	53.0	52.7
Proline	15.1	14.7	14.4
Glycine	13.6	13.7	13.5
Alanine	13.7	13.7	13.6
Cystine	5.34	5.61	5.56
Valine	15.2	15.5	15.2
Methionine	4.71	4.81	4.59
Isoleucine	14.3	14.6	14.1
Leucine	23.0	22.7	22.7
Tyrosine	11.3	10.5	10.9
Phenylalanine	15.5	15.1	15.1
Lysine	20.8	20.5	20.4
Histidine	8.58	8.30	8.27
Arginine	23.4	22.4	22.3
Tryptophan	3.68	3.61	3.41

*H.U. - Hemagglutinating Unit

**TIU - Trypsin Inhibitor Unit

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00142	REG07170-00143	REG07170-00144
Reg. Lot Number	GLP-0702-18254-S	GLP-0702-18254-S	GLP-0702-18254-S
Material Name	MON 87705	MON 87705	MON 87705
Site Code	CdT	CdT	CdT
Plot ID	101	206	306
Covance LIMS Number	81000020	81000059	81000037
Fatty Acids (%)			
8:0 Caprylic	< 0.0200	< 0.0200	< 0.0200
10:0 Capric	< 0.0200	< 0.0200	< 0.0200
12:0 Lauric	< 0.0200	< 0.0200	< 0.0200
14:0 Myristic	< 0.0200	< 0.0200	< 0.0200
14:1 Myristoleic	< 0.0200	< 0.0200	< 0.0200
15:0 Pentadecylic	< 0.0200	< 0.0200	< 0.0200
15:1 10c Pentadecenoic	< 0.0200	< 0.0200	< 0.0200
16:0 Palmitic	0.341	0.355	0.368
16:1 Palmitoleic	< 0.0200	< 0.0200	< 0.0200
17:0 Heptadecanoic	< 0.0200	< 0.0200	< 0.0200
17:1 9c Heptadecenoic	< 0.0200	< 0.0200	0.0225
18:0 Stearic	0.480	0.489	0.489
18:1 9t Octadecenoic	< 0.0200	< 0.0200	< 0.0200
18:1 Oleic	11.4	11.7	12.1
18:2 6c,9c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
18:2 Linoleic	1.48	1.55	1.62
18:2 9c,15c Octadecadienoic	< 0.0200	< 0.0200	0.0214
20:0 Arachidic	0.0433	0.0429	0.0460
18:3 Gamma Linolenic	< 0.0200	< 0.0200	< 0.0200
20:1 Eicosenoic	0.0536	0.0575	0.0566
18:3 Linolenic	1.02	1.06	1.10
20:2 11c,14c Eicosadienoic	< 0.0200	< 0.0200	< 0.0200
22:0 Behenic	0.0422	0.0436	0.0453
20:3 11c,14c,17c Eicosatrienoic	< 0.0200	< 0.0200	< 0.0200
20:4 Arachidonic	< 0.0200	< 0.0200	< 0.0200
24:0 Lignoceric	0.0222	0.0233	0.0225

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00214	REG07170-00215	REG07170-00216
Reg. Lot Number	GLP-0702-18254-S	GLP-0702-18254-S	GLP-0702-18254-S
Material Name	MON 87705	MON 87705	MON 87705
Site Code	MEL	MEL	MEL
Plot ID	101	202	304
Covance LIMS Number	81000049	81000057	81000056
Proximate (%)			
Moisture	10.4	11.2	11.2
Protein	30.1	32.1	32.8
Total Fat	17.1	16.5	16.2
Ash	5.61	5.39	5.32
Carbohydrates	36.8	34.8	34.5
Acid Detergent Fiber (%)	14.9	14.4	14.4
Neutral Detergent Fiber (%)	19.4	17.9	16.8
Lectin (H.U./mg)*	1.92	1.57	1.43
Trypsin Inhibitor (TIU/mg)**	36.8	29.0	28.1
Vitamin E (mg/100g)	3.09	2.80	2.81
Phytic Acid (%)	1.81	1.64	1.60
Raffinose (%)	0.505	0.480	0.545
Stachyose (%)	3.32	3.16	3.35
Isoflavones (µg/g)			
Daidzein	1870	1900	1830
Glycitein	136	131	118
Genistein	1220	1230	1190
Amino Acids (mg/g)			
Aspartic Acid	34.7	37.1	38.7
Threonine	11.7	11.9	12.3
Serine	15.9	15.3	16.5
Glutamic Acid	54.6	59.2	62.3
Proline	15.1	16.4	16.8
Glycine	13.6	14.5	15.0
Alanine	13.8	14.5	14.9
Cystine	5.41	5.41	5.53
Valine	15.4	16.9	17.4
Methionine	4.76	5.04	5.08
Isoleucine	14.4	15.8	16.3
Leucine	23.5	24.9	25.9
Tyrosine	11.0	11.2	11.1
Phenylalanine	15.6	16.5	17.3
Lysine	20.7	21.5	22.2
Histidine	8.13	8.60	8.94
Arginine	23.0	25.1	26.1
Tryptophan	3.47	3.58	3.80

*H.U. - Hemagglutinating Unit

**TIU - Trypsin Inhibitor Unit

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00214	REG07170-00215	REG07170-00216
Reg. Lot Number	GLP-0702-18254-S	GLP-0702-18254-S	GLP-0702-18254-S
Material Name	MON 87705	MON 87705	MON 87705
Site Code	MEL	MEL	MEL
Plot ID	101	202	304
Covance LIMS Number	81000049	81000057	81000056
Fatty Acids (%)			
8:0 Caprylic	< 0.0200	< 0.0200	< 0.0200
10:0 Capric	< 0.0200	< 0.0200	< 0.0200
12:0 Lauric	< 0.0200	< 0.0200	< 0.0200
14:0 Myristic	< 0.0200	< 0.0200	< 0.0200
14:1 Myristoleic	< 0.0200	< 0.0200	< 0.0200
15:0 Pentadecylic	< 0.0200	< 0.0200	< 0.0200
15:1 10c Pentadecenoic	< 0.0200	< 0.0200	< 0.0200
16:0 Palmitic	0.396	0.373	0.372
16:1 Palmitoleic	< 0.0200	< 0.0200	< 0.0200
17:0 Heptadecanoic	< 0.0200	< 0.0200	< 0.0200
17:1 9c Heptadecenoic	0.0243	0.0216	< 0.0200
18:0 Stearic	0.525	0.526	0.537
18:1 9t Octadecenoic	< 0.0200	< 0.0200	< 0.0200
18:1 Oleic	12.4	12.1	11.8
18:2 6c,9c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
18:2 Linoleic	1.79	1.65	1.57
18:2 9c,15c Octadecadienoic	0.0218	< 0.0200	< 0.0200
20:0 Arachidic	0.0478	0.0463	0.0470
18:3 Gamma Linolenic	< 0.0200	< 0.0200	< 0.0200
20:1 Eicosenoic	0.0589	0.0533	0.0530
18:3 Linolenic	1.09	1.04	1.01
20:2 11c,14c Eicosadienoic	< 0.0200	< 0.0200	< 0.0200
22:0 Behenic	0.0495	0.0467	0.0468
20:3 11c,14c,17c Eicosatrienoic	< 0.0200	< 0.0200	< 0.0200
20:4 Arachidonic	< 0.0200	< 0.0200	< 0.0200
24:0 Lignoceric	0.0285	0.0228	0.0224

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00286	REG07170-00287	REG07170-00288
Reg. Lot Number	GLP-0702-18254-S	GLP-0702-18254-S	GLP-0702-18254-S
Material Name	MON 87705	MON 87705	MON 87705
Site Code	QUI	QUI	QUI
Plot ID	102	204	305
Covance LIMS Number	81000045	81000024	81000042
Proximate (%)			
Moisture	10.6	10.2	10.4
Protein	34.5	33.2	31.9
Total Fat	16.7	17.5	17.4
Ash	5.42	5.56	5.75
Carbohydrates	32.8	33.5	34.6
Acid Detergent Fiber (%)	15.4	16.1	17.3
Neutral Detergent Fiber (%)	17.6	15.2	15.6
Lectin (H.U./mg)*	1.44	1.82	0.648
Trypsin Inhibitor (TIU/mg)**	29.7	38.0	46.6
Vitamin E (mg/100g)	3.33	3.32	3.91
Phytic Acid (%)	1.55	1.61	1.91
Raffinose (%)	0.527	0.499	0.576
Stachyose (%)	3.07	3.90	4.01
Isoflavones (µg/g)			
Daidzein	1100	1220	1300
Glycitein	94.7	44.1	96.8
Genistein	789	871	901
Amino Acids (mg/g)			
Aspartic Acid	40.1	38.4	37.3
Threonine	12.7	12.4	13.0
Serine	17.7	16.8	17.0
Glutamic Acid	64.3	61.2	58.6
Proline	17.2	16.7	15.9
Glycine	15.3	14.4	14.4
Alanine	15.2	14.6	14.3
Cystine	5.61	5.42	5.77
Valine	17.5	17.0	15.5
Methionine	5.08	4.90	4.87
Isoleucine	16.6	16.0	14.8
Leucine	26.9	25.6	24.8
Tyrosine	11.8	11.6	11.7
Phenylalanine	17.9	16.4	16.5
Lysine	22.8	22.2	21.6
Histidine	9.27	8.88	8.55
Arginine	27.9	26.4	25.3
Tryptophan	4.03	3.88	3.69

*H.U. - Hemagglutinating Unit

**TIU - Trypsin Inhibitor Unit

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00286	REG07170-00287	REG07170-00288
Reg. Lot Number	GLP-0702-18254-S	GLP-0702-18254-S	GLP-0702-18254-S
Material Name	MON 87705	MON 87705	MON 87705
Site Code	QUI	QUI	QUI
Plot ID	102	204	305
Covance LIMS Number	81000045	81000024	81000042
Fatty Acids (%)			
8:0 Caprylic	< 0.0200	< 0.0200	< 0.0200
10:0 Capric	< 0.0200	< 0.0200	< 0.0200
12:0 Lauric	< 0.0200	< 0.0200	< 0.0200
14:0 Myristic	< 0.0200	< 0.0200	< 0.0200
14:1 Myristoleic	< 0.0200	< 0.0200	< 0.0200
15:0 Pentadecylic	< 0.0200	< 0.0200	< 0.0200
15:1 10c Pentadecenoic	< 0.0200	< 0.0200	< 0.0200
16:0 Palmitic	0.359	0.394	0.379
16:1 Palmitoleic	< 0.0200	< 0.0200	< 0.0200
17:0 Heptadecanoic	< 0.0200	< 0.0200	< 0.0200
17:1 9c Heptadecenoic	0.0241	0.0220	< 0.0200
18:0 Stearic	0.603	0.589	0.531
18:1 9t Octadecenoic	< 0.0200	< 0.0200	< 0.0200
18:1 Oleic	12.5	13.1	13.1
18:2 6c,9c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
18:2 Linoleic	1.24	1.39	1.69
18:2 9c,15c Octadecadienoic	0.0236	0.0204	0.0243
20:0 Arachidic	0.0567	0.0534	0.0512
18:3 Gamma Linolenic	< 0.0200	< 0.0200	< 0.0200
20:1 Eicosenoic	0.0577	0.0638	0.0680
18:3 Linolenic	0.894	0.920	0.962
20:2 11c,14c Eicosadienoic	< 0.0200	< 0.0200	< 0.0200
22:0 Behenic	0.0517	0.0516	0.0500
20:3 11c,14c,17c Eicosatrienoic	< 0.0200	< 0.0200	< 0.0200
20:4 Arachidonic	< 0.0200	< 0.0200	< 0.0200
24:0 Lignoceric	0.0274	0.0284	0.0291

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00358	REG07170-00359	REG07170-00360
Reg. Lot Number	GLP-0702-18254-S	GLP-0702-18254-S	GLP-0702-18254-S
Material Name	MON 87705	MON 87705	MON 87705
Site Code	RAN	RAN	RAN
Plot ID	104	203	306
Covance LIMS Number	81000061	81000065	81000027
Proximate (%)			
Moisture	9.00	8.96	10.6
Protein	34.2	34.0	33.7
Total Fat	15.8	15.1	14.8
Ash	5.02	4.97	5.03
Carbohydrates	36.0	37.0	35.9
Acid Detergent Fiber (%)	14.3	15.0	15.0
Neutral Detergent Fiber (%)	12.2	15.0	13.9
Lectin (H.U./mg)*	3.32	3.00	3.37
Trypsin Inhibitor (TIU/mg)**	28.3	27.6	23.9
Vitamin E (mg/100g)	1.49	1.31	1.10
Phytic Acid (%)	1.48	1.47	1.44
Raffinose (%)	0.509	0.438	0.465
Stachyose (%)	3.29	3.09	3.89
Isoflavones (µg/g)			
Daidzein	1700	1760	1740
Glycitein	128	120	70.8
Genistein	1060	1100	1060
Amino Acids (mg/g)			
Aspartic Acid	39.3	40.4	38.4
Threonine	12.1	12.5	12.4
Serine	15.8	15.8	17.0
Glutamic Acid	63.1	65.0	61.9
Proline	17.7	17.6	16.8
Glycine	15.3	15.8	14.5
Alanine	15.0	15.5	14.5
Cystine	5.66	5.55	5.11
Valine	17.9	18.4	17.1
Methionine	5.32	5.22	4.88
Isoleucine	16.7	17.1	15.9
Leucine	26.3	27.0	25.8
Tyrosine	11.5	12.1	11.5
Phenylalanine	17.6	18.0	17.3
Lysine	22.5	23.2	22.0
Histidine	9.23	9.48	9.03
Arginine	27.4	28.8	27.5
Tryptophan	4.04	4.16	3.94

*H.U. - Hemagglutinating Unit

**TIU - Trypsin Inhibitor Unit

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00358	REG07170-00359	REG07170-00360
Reg. Lot Number	GLP-0702-18254-S	GLP-0702-18254-S	GLP-0702-18254-S
Material Name	MON 87705	MON 87705	MON 87705
Site Code	RAN	RAN	RAN
Plot ID	104	203	306
Covance LIMS Number	81000061	81000065	81000027
Fatty Acids (%)			
8:0 Caprylic	< 0.0200	< 0.0200	< 0.0200
10:0 Capric	< 0.0200	< 0.0200	< 0.0200
12:0 Lauric	< 0.0200	< 0.0200	< 0.0200
14:0 Myristic	< 0.0200	< 0.0200	< 0.0200
14:1 Myristoleic	< 0.0200	< 0.0200	< 0.0200
15:0 Pentadecylic	< 0.0200	< 0.0200	< 0.0200
15:1 10c Pentadecenoic	< 0.0200	< 0.0200	< 0.0200
16:0 Palmitic	0.364	0.344	0.338
16:1 Palmitoleic	< 0.0200	< 0.0200	< 0.0200
17:0 Heptadecanoic	< 0.0200	< 0.0200	< 0.0200
17:1 9c Heptadecenoic	0.0227	0.0221	0.0241
18:0 Stearic	0.516	0.473	0.470
18:1 9t Octadecenoic	< 0.0200	< 0.0200	< 0.0200
18:1 Oleic	11.5	10.8	10.3
18:2 6c,9c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
18:2 Linoleic	1.57	1.61	1.75
18:2 9c,15c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
20:0 Arachidic	0.0443	0.0398	0.0401
18:3 Gamma Linolenic	< 0.0200	< 0.0200	< 0.0200
20:1 Eicosenoic	0.0466	0.0423	0.0378
18:3 Linolenic	1.04	1.05	1.10
20:2 11c,14c Eicosadienoic	< 0.0200	< 0.0200	< 0.0200
22:0 Behenic	0.0446	0.0407	0.0388
20:3 11c,14c,17c Eicosatrienoic	< 0.0200	< 0.0200	< 0.0200
20:4 Arachidonic	< 0.0200	< 0.0200	< 0.0200
24:0 Lignoceric	< 0.0200	< 0.0200	< 0.0200

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00055	REG07170-00056	REG07170-00057
Reg. Lot Number	GLP-0702-18252-S	GLP-0702-18252-S	GLP-0702-18252-S
Material Name	Asgrow A3525	Asgrow A3525	Asgrow A3525
Site Code	SFR	SFR	SFR
Plot ID	102	202	302
Covance LIMS Number	81000022	81000064	81000030
Proximate (%)			
Moisture	12.7	12.4	12.3
Protein	27.0	26.9	27.9
Total Fat	17.4	17.8	17.0
Ash	5.43	5.39	5.39
Carbohydrates	37.5	37.5	37.4
Acid Detergent Fiber (%)	15.4	15.5	15.8
Neutral Detergent Fiber (%)	16.6	17.4	18.5
Lectin (H.U./mg)*	1.80	2.99	1.68
Trypsin Inhibitor (TIU/mg)**	29.0	37.6	29.6
Vitamin E (mg/100g)	2.25	3.06	2.34
Phytic Acid (%)	1.50	1.73	1.70
Raffinose (%)	0.609	0.579	0.604
Stachyose (%)	3.87	3.07	3.82
Isoflavones (µg/g)			
Daidzein	2240	2130	1950
Glycitein	85.6	128	108
Genistein	1280	1270	1100
Amino Acids (mg/g)			
Aspartic Acid	30.6	31.0	32.0
Threonine	10.9	10.3	10.9
Serine	14.1	12.7	14.7
Glutamic Acid	47.3	47.8	50.1
Proline	13.3	13.3	14.0
Glycine	12.3	12.5	12.4
Alanine	12.5	12.7	12.7
Cystine	4.77	5.18	4.95
Valine	13.5	14.4	14.3
Methionine	4.26	4.46	4.32
Isoleucine	12.7	13.4	13.5
Leucine	20.7	21.0	21.7
Tyrosine	9.88	9.61	9.91
Phenylalanine	13.8	13.9	14.4
Lysine	18.3	18.7	19.0
Histidine	7.29	7.46	7.65
Arginine	20.3	20.2	21.0
Tryptophan	3.03	3.34	3.34

*H.U. - Hemagglutinating Unit

**TIU - Trypsin Inhibitor Unit

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00055	REG07170-00056	REG07170-00057
Reg. Lot Number	GLP-0702-18252-S	GLP-0702-18252-S	GLP-0702-18252-S
Material Name	Asgrow A3525	Asgrow A3525	Asgrow A3525
Site Code	SFR	SFR	SFR
Plot ID	102	202	302
Covance LIMS Number	81000022	81000064	81000030
Fatty Acids (%)			
8:0 Caprylic	< 0.0200	< 0.0200	< 0.0200
10:0 Capric	< 0.0200	< 0.0200	< 0.0200
12:0 Lauric	< 0.0200	< 0.0200	< 0.0200
14:0 Myristic	< 0.0200	< 0.0200	< 0.0200
14:1 Myristoleic	< 0.0200	< 0.0200	< 0.0200
15:0 Pentadecylic	< 0.0200	< 0.0200	< 0.0200
15:1 10c Pentadecenoic	< 0.0200	< 0.0200	< 0.0200
16:0 Palmitic	1.83	1.88	1.76
16:1 Palmitoleic	< 0.0200	< 0.0200	< 0.0200
17:0 Heptadecanoic	< 0.0200	< 0.0200	< 0.0200
17:1 9c Heptadecenoic	< 0.0200	< 0.0200	< 0.0200
18:0 Stearic	0.704	0.726	0.713
18:1 9t Octadecenoic	< 0.0200	< 0.0200	< 0.0200
18:1 Oleic	3.66	3.88	3.61
18:2 6c,9c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
18:2 Linoleic	8.75	9.04	8.48
18:2 9c,15c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
20:0 Arachidic	0.0516	0.0530	0.0520
18:3 Gamma Linolenic	< 0.0200	< 0.0200	< 0.0200
20:1 Eicosenoic	0.0289	0.0329	0.0295
18:3 Linolenic	1.42	1.44	1.36
20:2 11c,14c Eicosadienoic	< 0.0200	< 0.0200	< 0.0200
22:0 Behenic	0.0499	0.0502	0.0489
20:3 11c,14c,17c Eicosatrienoic	< 0.0200	< 0.0200	< 0.0200
20:4 Arachidonic	< 0.0200	< 0.0200	< 0.0200
24:0 Lignoceric	0.0219	0.0244	0.0218

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00127	REG07170-00128	REG07170-00129
Reg. Lot Number	GLP-0702-18252-S	GLP-0702-18252-S	GLP-0702-18252-S
Material Name	Asgrow A3525	Asgrow A3525	Asgrow A3525
Site Code	CdT	CdT	CdT
Plot ID	103	201	301
Covance LIMS Number	81000067	81000046	81000055
Proximate (%)			
Moisture	10.2	11.0	11.4
Protein	30.9	30.3	30.3
Total Fat	17.8	17.6	16.8
Ash	5.55	5.50	5.59
Carbohydrates	35.6	35.6	35.9
Acid Detergent Fiber (%)	14.7	14.9	13.9
Neutral Detergent Fiber (%)	15.9	16.5	15.7
Lectin (H.U./mg)*	4.43	1.96	1.97
Trypsin Inhibitor (TIU/mg)**	44.7	39.0	33.1
Vitamin E (mg/100g)	3.76	3.72	3.31
Phytic Acid (%)	1.60	1.61	1.58
Raffinose (%)	0.507	0.455	0.439
Stachyose (%)	2.88	2.73	2.69
Isoflavones (µg/g)			
Daidzein	981	1020	1160
Glycitein	137	126	129
Genistein	675	721	810
Amino Acids (mg/g)			
Aspartic Acid	35.6	35.6	34.2
Threonine	11.3	12.0	12.3
Serine	14.0	16.1	15.5
Glutamic Acid	55.9	56.0	53.2
Proline	15.5	14.8	14.6
Glycine	14.1	14.0	13.4
Alanine	14.1	14.1	13.4
Cystine	5.64	5.37	5.45
Valine	16.3	15.8	14.4
Methionine	4.90	4.61	4.83
Isoleucine	15.4	14.8	13.7
Leucine	23.8	23.9	22.6
Tyrosine	10.3	10.6	10.5
Phenylalanine	15.9	16.0	15.1
Lysine	21.0	21.0	20.0
Histidine	8.44	8.51	8.12
Arginine	23.0	23.0	22.2
Tryptophan	3.86	3.68	3.61

*H.U. - Hemagglutinating Unit

**TIU - Trypsin Inhibitor Unit

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00127	REG07170-00128	REG07170-00129
Reg. Lot Number	GLP-0702-18252-S	GLP-0702-18252-S	GLP-0702-18252-S
Material Name	Asgrow A3525	Asgrow A3525	Asgrow A3525
Site Code	CdT	CdT	CdT
Plot ID	103	201	301
Covance LIMS Number	81000067	81000046	81000055
Fatty Acids (%)			
8:0 Caprylic	< 0.0200	< 0.0200	< 0.0200
10:0 Capric	< 0.0200	< 0.0200	< 0.0200
12:0 Lauric	< 0.0200	< 0.0200	< 0.0200
14:0 Myristic	< 0.0200	< 0.0200	< 0.0200
14:1 Myristoleic	< 0.0200	< 0.0200	< 0.0200
15:0 Pentadecylic	< 0.0200	< 0.0200	< 0.0200
15:1 10c Pentadecenoic	< 0.0200	< 0.0200	< 0.0200
16:0 Palmitic	1.83	1.81	1.74
16:1 Palmitoleic	< 0.0200	< 0.0200	< 0.0200
17:0 Heptadecanoic	< 0.0200	< 0.0200	< 0.0200
17:1 9c Heptadecenoic	< 0.0200	< 0.0200	< 0.0200
18:0 Stearic	0.795	0.761	0.727
18:1 9t Octadecenoic	< 0.0200	< 0.0200	< 0.0200
18:1 Oleic	3.99	3.89	3.59
18:2 6c,9c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
18:2 Linoleic	8.90	8.79	8.42
18:2 9c,15c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
20:0 Arachidic	0.0603	0.0607	0.0537
18:3 Gamma Linolenic	< 0.0200	< 0.0200	< 0.0200
20:1 Eicosenoic	0.0360	0.0356	0.0311
18:3 Linolenic	1.38	1.36	1.32
20:2 11c,14c Eicosadienoic	< 0.0200	< 0.0200	< 0.0200
22:0 Behenic	0.0534	0.0503	0.0463
20:3 11c,14c,17c Eicosatrienoic	< 0.0200	< 0.0200	< 0.0200
20:4 Arachidonic	< 0.0200	< 0.0200	< 0.0200
24:0 Lignoceric	0.0264	0.0262	0.0235

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00199	REG07170-00200	REG07170-00201
Reg. Lot Number	GLP-0702-18252-S	GLP-0702-18252-S	GLP-0702-18252-S
Material Name	Asgrow A3525	Asgrow A3525	Asgrow A3525
Site Code	MEL	MEL	MEL
Plot ID	103	204	306
Covance LIMS Number	81000039	81000021	81000044
Proximate (%)			
Moisture	11.1	11.6	11.4
Protein	29.6	31.8	30.0
Total Fat	17.9	16.8	17.5
Ash	5.81	5.43	5.80
Carbohydrates	35.6	34.4	35.3
Acid Detergent Fiber (%)	15.4	14.9	14.2
Neutral Detergent Fiber (%)	15.4	15.5	16.5
Lectin (H.U./mg)*	0.921	2.12	1.45
Trypsin Inhibitor (TIU/mg)**	36.7	28.0	31.2
Vitamin E (mg/100g)	3.60	3.35	3.24
Phytic Acid (%)	1.74	1.47	1.84
Raffinose (%)	0.497	0.465	0.514
Stachyose (%)	3.34	3.61	3.11
Isoflavones (µg/g)			
Daidzein	1640	1710	2000
Glycitein	114	116	148
Genistein	1100	1040	1280
Amino Acids (mg/g)			
Aspartic Acid	34.1	36.7	34.0
Threonine	11.4	13.0	12.0
Serine	15.4	16.7	15.4
Glutamic Acid	53.3	57.9	53.1
Proline	14.6	15.7	14.4
Glycine	13.5	14.3	13.5
Alanine	13.7	14.2	13.7
Cystine	5.38	4.84	5.25
Valine	15.4	15.6	14.9
Methionine	4.61	4.52	4.67
Isoleucine	14.3	14.7	14.0
Leucine	23.1	24.4	23.0
Tyrosine	11.0	11.5	10.6
Phenylalanine	15.5	16.5	15.3
Lysine	20.4	21.1	19.9
Histidine	7.97	8.42	7.92
Arginine	22.6	24.7	22.6
Tryptophan	3.69	3.55	3.62

*H.U. - Hemagglutinating Unit

**TIU - Trypsin Inhibitor Unit

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00199	REG07170-00200	REG07170-00201
Reg. Lot Number	GLP-0702-18252-S	GLP-0702-18252-S	GLP-0702-18252-S
Material Name	Asgrow A3525	Asgrow A3525	Asgrow A3525
Site Code	MEL	MEL	MEL
Plot ID	103	204	306
Covance LIMS Number	81000039	81000021	81000044
Fatty Acids (%)			
8:0 Caprylic	< 0.0200	< 0.0200	< 0.0200
10:0 Capric	< 0.0200	< 0.0200	< 0.0200
12:0 Lauric	< 0.0200	< 0.0200	< 0.0200
14:0 Myristic	< 0.0200	< 0.0200	< 0.0200
14:1 Myristoleic	< 0.0200	< 0.0200	< 0.0200
15:0 Pentadecylic	< 0.0200	< 0.0200	< 0.0200
15:1 10c Pentadecenoic	< 0.0200	< 0.0200	< 0.0200
16:0 Palmitic	1.80	1.72	1.84
16:1 Palmitoleic	< 0.0200	< 0.0200	< 0.0200
17:0 Heptadecanoic	< 0.0200	< 0.0200	< 0.0200
17:1 9c Heptadecenoic	< 0.0200	< 0.0200	< 0.0200
18:0 Stearic	0.711	0.737	0.721
18:1 9t Octadecenoic	< 0.0200	< 0.0200	< 0.0200
18:1 Oleic	3.77	3.57	3.70
18:2 6c,9c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
18:2 Linoleic	8.89	8.46	9.12
18:2 9c,15c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
20:0 Arachidic	0.0536	0.0547	0.0578
18:3 Gamma Linolenic	< 0.0200	< 0.0200	< 0.0200
20:1 Eicosenoic	0.0339	0.0317	0.0347
18:3 Linolenic	1.34	1.25	1.37
20:2 11c,14c Eicosadienoic	< 0.0200	< 0.0200	< 0.0200
22:0 Behenic	0.0470	0.0493	0.0513
20:3 11c,14c,17c Eicosatrienoic	< 0.0200	< 0.0200	< 0.0200
20:4 Arachidonic	< 0.0200	< 0.0200	< 0.0200
24:0 Lignoceric	0.0267	0.0232	0.0278

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00272	REG07170-00273
Reg. Lot Number	GLP-0702-18252-S	GLP-0702-18252-S
Material Name	Asgrow A3525	Asgrow A3525
Site Code	QUI	QUI
Plot ID	202	302
Covance LIMS Number	81000025	81000060
Proximate (%)		
Moisture	11.1	11.0
Protein	32.7	32.0
Total Fat	17.5	17.6
Ash	5.45	5.50
Carbohydrates	33.3	33.9
Acid Detergent Fiber (%)	14.8	13.6
Neutral Detergent Fiber (%)	15.0	14.4
Lectin (H.U./mg)*	2.06	4.92
Trypsin Inhibitor (TIU/mg)**	36.9	43.8
Vitamin E (mg/100g)	3.40	3.21
Phytic Acid (%)	1.69	1.95
Raffinose (%)	0.507	0.466
Stachyose (%)	3.70	3.13
Isoflavones (µg/g)		
Daidzein	1240	1370
Glycitein	64.1	97.2
Genistein	784	908
Amino Acids (mg/g)		
Aspartic Acid	39.4	37.5
Threonine	12.5	11.9
Serine	17.1	15.5
Glutamic Acid	63.0	59.6
Proline	16.9	16.0
Glycine	14.7	14.7
Alanine	14.8	14.5
Cystine	5.42	5.58
Valine	17.4	16.9
Methionine	4.91	5.03
Isoleucine	16.5	16.0
Leucine	26.1	25.0
Tyrosine	11.7	11.1
Phenylalanine	17.7	16.7
Lysine	22.3	21.5
Histidine	8.98	8.62
Arginine	26.6	25.1
Tryptophan	3.86	3.89

*H.U. - Hemagglutinating Unit

**TIU - Trypsin Inhibitor Unit

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00272	REG07170-00273
Reg. Lot Number	GLP-0702-18252-S	GLP-0702-18252-S
Material Name	Asgrow A3525	Asgrow A3525
Site Code	QUI	QUI
Plot ID	202	302
Covance LIMS Number	81000025	81000060
Fatty Acids (%)		
8:0 Caprylic	< 0.0200	< 0.0200
10:0 Capric	< 0.0200	< 0.0200
12:0 Lauric	< 0.0200	< 0.0200
14:0 Myristic	< 0.0200	< 0.0200
14:1 Myristoleic	< 0.0200	< 0.0200
15:0 Pentadecylic	< 0.0200	< 0.0200
15:1 10c Pentadecenoic	< 0.0200	< 0.0200
16:0 Palmitic	1.73	1.78
16:1 Palmitoleic	< 0.0200	< 0.0200
17:0 Heptadecanoic	< 0.0200	< 0.0200
17:1 9c Heptadecenoic	< 0.0200	< 0.0200
18:0 Stearic	0.799	0.749
18:1 9t Octadecenoic	< 0.0200	< 0.0200
18:1 Oleic	4.13	4.08
18:2 6c,9c Octadecadienoic	< 0.0200	< 0.0200
18:2 Linoleic	8.51	8.79
18:2 9c,15c Octadecadienoic	< 0.0200	< 0.0200
20:0 Arachidic	0.0586	0.0559
18:3 Gamma Linolenic	< 0.0200	< 0.0200
20:1 Eicosenoic	0.0336	0.0338
18:3 Linolenic	1.13	1.20
20:2 11c,14c Eicosadienoic	< 0.0200	< 0.0200
22:0 Behenic	0.0509	0.0484
20:3 11c,14c,17c Eicosatrienoic	< 0.0200	< 0.0200
20:4 Arachidonic	< 0.0200	< 0.0200
24:0 Lignoceric	0.0258	0.0244

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00343	REG07170-00344	REG07170-00345
Reg. Lot Number	GLP-0702-18252-S	GLP-0702-18252-S	GLP-0702-18252-S
Material Name	Asgrow A3525	Asgrow A3525	Asgrow A3525
Site Code	RAN	RAN	RAN
Plot ID	105	205	304
Covance LIMS Number	81000043	81000041	81000032
Proximate (%)			
Moisture	12.4	12.2	11.5
Protein	32.1	32.1	33.1
Total Fat	15.6	15.9	15.6
Ash	4.97	5.16	4.85
Carbohydrates	34.9	34.6	35.0
Acid Detergent Fiber (%)	11.7	12.2	12.9
Neutral Detergent Fiber (%)	12.8	15.0	15.5
Lectin (H.U./mg)*	0.530	0.641	2.42
Trypsin Inhibitor (TIU/mg)**	24.9	26.3	24.1
Vitamin E (mg/100g)	1.60	1.68	1.50
Phytic Acid (%)	1.55	1.54	1.44
Raffinose (%)	0.500	0.500	0.488
Stachyose (%)	3.33	3.29	3.15
Isoflavones (µg/g)			
Daidzein	1580	1780	1780
Glycitein	97.1	129	118
Genistein	924	1040	1070
Amino Acids (mg/g)			
Aspartic Acid	37.6	36.9	37.5
Threonine	12.1	12.0	11.9
Serine	17.0	16.5	16.8
Glutamic Acid	60.4	59.1	60.6
Proline	15.8	16.0	16.4
Glycine	14.6	14.5	14.0
Alanine	14.5	14.2	14.1
Cystine	5.16	5.06	5.05
Valine	16.7	16.4	16.7
Methionine	4.77	4.60	4.70
Isoleucine	15.5	15.3	15.7
Leucine	25.4	25.0	25.2
Tyrosine	11.3	11.5	11.5
Phenylalanine	17.0	16.7	17.0
Lysine	21.5	21.2	21.4
Histidine	8.81	8.62	8.71
Arginine	26.0	25.8	26.1
Tryptophan	3.89	3.82	3.92

*H.U. - Hemagglutinating Unit

**TIU - Trypsin Inhibitor Unit

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00343	REG07170-00344	REG07170-00345
Reg. Lot Number	GLP-0702-18252-S	GLP-0702-18252-S	GLP-0702-18252-S
Material Name	Asgrow A3525	Asgrow A3525	Asgrow A3525
Site Code	RAN	RAN	RAN
Plot ID	105	205	304
Covance LIMS Number	81000043	81000041	81000032
Fatty Acids (%)			
8:0 Caprylic	< 0.0200	< 0.0200	< 0.0200
10:0 Capric	< 0.0200	< 0.0200	< 0.0200
12:0 Lauric	< 0.0200	< 0.0200	< 0.0200
14:0 Myristic	< 0.0200	< 0.0200	< 0.0200
14:1 Myristoleic	< 0.0200	< 0.0200	< 0.0200
15:0 Pentadecylic	< 0.0200	< 0.0200	< 0.0200
15:1 10c Pentadecenoic	< 0.0200	< 0.0200	< 0.0200
16:0 Palmitic	1.64	1.64	1.62
16:1 Palmitoleic	< 0.0200	< 0.0200	< 0.0200
17:0 Heptadecanoic	< 0.0200	< 0.0200	< 0.0200
17:1 9c Heptadecenoic	< 0.0200	< 0.0200	< 0.0200
18:0 Stearic	0.671	0.670	0.672
18:1 9t Octadecenoic	< 0.0200	< 0.0200	< 0.0200
18:1 Oleic	3.23	3.24	3.16
18:2 6c,9c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
18:2 Linoleic	8.05	8.04	7.94
18:2 9c,15c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
20:0 Arachidic	0.0485	0.0493	0.0486
18:3 Gamma Linolenic	< 0.0200	< 0.0200	< 0.0200
20:1 Eicosenoic	0.0243	0.0247	0.0222
18:3 Linolenic	1.27	1.26	1.24
20:2 11c,14c Eicosadienoic	< 0.0200	< 0.0200	< 0.0200
22:0 Behenic	0.0451	0.0452	0.0438
20:3 11c,14c,17c Eicosatrienoic	< 0.0200	< 0.0200	< 0.0200
20:4 Arachidonic	< 0.0200	< 0.0200	< 0.0200
24:0 Lignoceric	< 0.0200	< 0.0200	< 0.0200

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00058	REG07170-00059	REG07170-00060
Reg. Lot Number	GLP-0707-18806-S	GLP-0707-18806-S	GLP-0707-18806-S
Material Name	Asgrow A2869	Asgrow A2869	Asgrow A2869
Site Code	SFR	SFR	SFR
Plot ID	105	204	304
Covance LIMS Number	81000036	81000284	81000259
Proximate (%)			
Moisture	11.1	9.68	10.5
Protein	30.2	27.7	31.3
Total Fat	19.4	20.2	18.3
Ash	5.18	5.51	5.30
Carbohydrates	34.1	36.9	34.6
Acid Detergent Fiber (%)	15.0	16.4	11.9
Neutral Detergent Fiber (%)	16.7	13.7	14.6
Lectin (H.U./mg)*	1.26	7.16	5.39
Trypsin Inhibitor (TIU/mg)**	45.7	40.1	29.4
Vitamin E (mg/100g)	2.65	3.08	2.47
Phytic Acid (%)	1.51	1.85	1.73
Raffinose (%)	0.711	0.654	0.539
Stachyose (%)	3.57	3.01	3.38
Isoflavones (µg/g)			
Daidzein	683	927	946
Glycitein	252	320	253
Genistein	794	1110	1170
Amino Acids (mg/g)			
Aspartic Acid	34.8	31.4	35.9
Threonine	11.8	11.4	12.4
Serine	15.5	14.7	16.5
Glutamic Acid	53.2	46.7	55.0
Proline	15.2	13.2	15.2
Glycine	13.8	12.5	14.2
Alanine	13.9	13.0	14.3
Cystine	5.28	5.23	5.42
Valine	15.8	14.1	15.9
Methionine	4.56	4.28	4.79
Isoleucine	14.8	13.3	14.9
Leucine	23.7	21.6	24.3
Tyrosine	10.8	10.1	10.6
Phenylalanine	15.9	14.3	16.1
Lysine	20.1	18.7	20.7
Histidine	8.27	7.63	8.60
Arginine	22.4	19.9	23.1
Tryptophan	3.66	2.99	3.65

*H.U. - Hemagglutinating Unit

**TIU - Trypsin Inhibitor Unit

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00058	REG07170-00059	REG07170-00060
Reg. Lot Number	GLP-0707-18806-S	GLP-0707-18806-S	GLP-0707-18806-S
Material Name	Asgrow A2869	Asgrow A2869	Asgrow A2869
Site Code	SFR	SFR	SFR
Plot ID	105	204	304
Covance LIMS Number	81000036	81000284	81000259
Fatty Acids (%)			
8:0 Caprylic	< 0.0200	< 0.0200	< 0.0200
10:0 Capric	< 0.0200	< 0.0200	< 0.0200
12:0 Lauric	< 0.0200	< 0.0200	< 0.0200
14:0 Myristic	< 0.0200	< 0.0200	< 0.0200
14:1 Myristoleic	< 0.0200	< 0.0200	< 0.0200
15:0 Pentadecylic	< 0.0200	< 0.0200	< 0.0200
15:1 10c Pentadecenoic	< 0.0200	< 0.0200	< 0.0200
16:0 Palmitic	1.75	1.89	1.72
16:1 Palmitoleic	< 0.0200	< 0.0200	< 0.0200
17:0 Heptadecanoic	< 0.0200	< 0.0200	< 0.0200
17:1 9c Heptadecenoic	< 0.0200	< 0.0200	< 0.0200
18:0 Stearic	0.784	0.751	0.726
18:1 9t Octadecenoic	< 0.0200	< 0.0200	< 0.0200
18:1 Oleic	4.56	4.67	4.08
18:2 6c,9c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
18:2 Linoleic	10.0	10.6	9.85
18:2 9c,15c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
20:0 Arachidic	0.0591	0.0559	0.0521
18:3 Gamma Linolenic	< 0.0200	< 0.0200	< 0.0200
20:1 Eicosenoic	0.0342	0.0384	0.0301
18:3 Linolenic	1.40	1.55	1.46
20:2 11c,14c Eicosadienoic	< 0.0200	< 0.0200	< 0.0200
22:0 Behenic	0.0568	0.0588	0.0531
20:3 11c,14c,17c Eicosatrienoic	< 0.0200	< 0.0200	< 0.0200
20:4 Arachidonic	< 0.0200	< 0.0200	< 0.0200
24:0 Lignoceric	0.0268	0.0269	0.0230

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00064	REG07170-00065	REG07170-00066
Reg. Lot Number	GLP-0707-18807-S	GLP-0707-18807-S	GLP-0707-18807-S
Material Name	Asgrow A3244 (A)	Asgrow A3244 (A)	Asgrow A3244 (A)
Site Code	SFR	SFR	SFR
Plot ID	103	206	303
Covance LIMS Number	81000050	81000283	81000257
Proximate (%)			
Moisture	11.7	10.2	10.2
Protein	28.5	30.7	28.6
Total Fat	18.6	16.9	18.7
Ash	5.13	5.49	5.65
Carbohydrates	36.1	36.7	36.9
Acid Detergent Fiber (%)	15.0	15.9	13.8
Neutral Detergent Fiber (%)	17.5	12.2	16.4
Lectin (H.U./mg)*	2.18	2.91	2.19
Trypsin Inhibitor (TIU/mg)**	26.4	26.7	30.5
Vitamin E (mg/100g)	2.13	1.89	2.18
Phytic Acid (%)	1.51	1.68	1.55
Raffinose (%)	0.548	0.518	0.552
Stachyose (%)	2.82	2.80	2.85
Isoflavones (µg/g)			
Daidzein	1880	2100	1770
Glycitein	117	150	111
Genistein	1380	1420	1300
Amino Acids (mg/g)			
Aspartic Acid	33.0	33.9	33.4
Threonine	11.4	11.4	11.7
Serine	15.2	15.7	15.5
Glutamic Acid	51.5	53.2	51.9
Proline	14.3	14.6	14.1
Glycine	12.9	13.2	13.1
Alanine	13.1	13.3	13.5
Cystine	5.01	4.90	5.07
Valine	14.7	15.0	14.7
Methionine	4.46	4.42	4.35
Isoleucine	13.8	14.0	13.7
Leucine	22.6	23.2	22.5
Tyrosine	10.5	10.1	10.4
Phenylalanine	15.0	15.4	15.0
Lysine	19.5	19.8	19.8
Histidine	7.83	8.01	7.96
Arginine	21.7	22.7	21.8
Tryptophan	3.57	3.07	3.25

*H.U. - Hemagglutinating Unit

**TIU - Trypsin Inhibitor Unit

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00064	REG07170-00065	REG07170-00066
Reg. Lot Number	GLP-0707-18807-S	GLP-0707-18807-S	GLP-0707-18807-S
Material Name	Asgrow A3244 (A)	Asgrow A3244 (A)	Asgrow A3244 (A)
Site Code	SFR	SFR	SFR
Plot ID	103	206	303
Covance LIMS Number	81000050	81000283	81000257
Fatty Acids (%)			
8:0 Caprylic	< 0.0200	< 0.0200	< 0.0200
10:0 Capric	< 0.0200	< 0.0200	< 0.0200
12:0 Lauric	< 0.0200	< 0.0200	< 0.0200
14:0 Myristic	< 0.0200	< 0.0200	< 0.0200
14:1 Myristoleic	< 0.0200	< 0.0200	< 0.0200
15:0 Pentadecylic	< 0.0200	< 0.0200	< 0.0200
15:1 10c Pentadecenoic	< 0.0200	< 0.0200	< 0.0200
16:0 Palmitic	2.03	1.88	1.97
16:1 Palmitoleic	< 0.0200	< 0.0200	< 0.0200
17:0 Heptadecanoic	< 0.0200	< 0.0200	< 0.0200
17:1 9c Heptadecenoic	< 0.0200	< 0.0200	< 0.0200
18:0 Stearic	0.804	0.740	0.780
18:1 9t Octadecenoic	< 0.0200	< 0.0200	< 0.0200
18:1 Oleic	4.05	3.44	3.87
18:2 6c,9c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
18:2 Linoleic	9.34	8.73	9.08
18:2 9c,15c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
20:0 Arachidic	0.0614	0.0564	0.0617
18:3 Gamma Linolenic	< 0.0200	< 0.0200	< 0.0200
20:1 Eicosenoic	0.0353	0.0293	0.0321
18:3 Linolenic	1.45	1.38	1.44
20:2 11c,14c Eicosadienoic	< 0.0200	< 0.0200	< 0.0200
22:0 Behenic	0.0601	0.0547	0.0586
20:3 11c,14c,17c Eicosatrienoic	< 0.0200	< 0.0200	< 0.0200
20:4 Arachidonic	< 0.0200	< 0.0200	< 0.0200
24:0 Lignoceric	0.0279	0.0208	0.0248

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00067	REG07170-00068	REG07170-00069
Reg. Lot Number	GLP-0707-18823-S	GLP-0707-18823-S	GLP-0707-18823-S
Material Name	Hoegemeyer 333 (A)	Hoegemeyer 333 (A)	Hoegemeyer 333 (A)
Site Code	SFR	SFR	SFR
Plot ID	106	203	306
Covance LIMS Number	81000034	81000280	81000286
Proximate (%)			
Moisture	11.8	9.93	10.0
Protein	26.4	27.2	28.4
Total Fat	19.2	20.4	18.4
Ash	5.29	5.69	5.51
Carbohydrates	37.3	36.8	37.7
Acid Detergent Fiber (%)	15.7	15.1	15.7
Neutral Detergent Fiber (%)	16.3	11.9	13.1
Lectin (H.U./mg)*	2.16	2.86	1.73
Trypsin Inhibitor (TIU/mg)**	34.8	40.9	34.2
Vitamin E (mg/100g)	1.97	2.13	3.08
Phytic Acid (%)	1.70	1.69	1.77
Raffinose (%)	0.490	0.547	0.461
Stachyose (%)	3.13	2.72	2.63
Isoflavones (µg/g)			
Daidzein	2700	2310	2400
Glycitein	173	181	140
Genistein	2030	1840	1890
Amino Acids (mg/g)			
Aspartic Acid	29.7	31.3	32.2
Threonine	10.8	11.0	11.1
Serine	13.7	15.0	14.7
Glutamic Acid	45.3	48.0	50.0
Proline	12.6	13.3	13.9
Glycine	11.5	12.1	12.5
Alanine	11.8	12.5	12.8
Cystine	4.80	5.12	4.99
Valine	12.8	13.4	14.2
Methionine	4.05	4.27	4.31
Isoleucine	12.1	12.7	13.4
Leucine	19.9	21.2	22.0
Tyrosine	9.48	10.2	9.99
Phenylalanine	13.2	14.1	14.5
Lysine	17.6	18.7	19.1
Histidine	6.98	7.45	7.68
Arginine	19.0	20.1	20.8
Tryptophan	3.13	3.07	2.99

*H.U. - Hemagglutinating Unit

**TIU - Trypsin Inhibitor Unit

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00067	REG07170-00068	REG07170-00069
Reg. Lot Number	GLP-0707-18823-S	GLP-0707-18823-S	GLP-0707-18823-S
Material Name	Hoegemeyer 333 (A)	Hoegemeyer 333 (A)	Hoegemeyer 333 (A)
Site Code	SFR	SFR	SFR
Plot ID	106	203	306
Covance LIMS Number	81000034	81000280	81000286
Fatty Acids (%)			
8:0 Caprylic	< 0.0200	< 0.0200	< 0.0200
10:0 Capric	< 0.0200	< 0.0200	< 0.0200
12:0 Lauric	< 0.0200	< 0.0200	< 0.0200
14:0 Myristic	< 0.0200	< 0.0200	< 0.0200
14:1 Myristoleic	< 0.0200	< 0.0200	< 0.0200
15:0 Pentadecylic	< 0.0200	< 0.0200	< 0.0200
15:1 10c Pentadecenoic	< 0.0200	< 0.0200	< 0.0200
16:0 Palmitic	1.89	2.04	1.84
16:1 Palmitoleic	< 0.0200	< 0.0200	< 0.0200
17:0 Heptadecanoic	< 0.0200	< 0.0200	< 0.0200
17:1 9c Heptadecenoic	< 0.0200	< 0.0200	< 0.0200
18:0 Stearic	0.749	0.819	0.728
18:1 9t Octadecenoic	< 0.0200	< 0.0200	< 0.0200
18:1 Oleic	4.07	4.52	3.84
18:2 6c,9c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
18:2 Linoleic	9.84	10.5	9.66
18:2 9c,15c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
20:0 Arachidic	0.0558	0.0609	0.0533
18:3 Gamma Linolenic	< 0.0200	< 0.0200	< 0.0200
20:1 Eicosenoic	0.0330	0.0383	0.0282
18:3 Linolenic	1.54	1.64	1.54
20:2 11c,14c Eicosadienoic	< 0.0200	< 0.0200	< 0.0200
22:0 Behenic	0.0592	0.0609	0.0522
20:3 11c,14c,17c Eicosatrienoic	< 0.0200	< 0.0200	< 0.0200
20:4 Arachidonic	< 0.0200	< 0.0200	< 0.0200
24:0 Lignoceric	0.0232	0.0269	< 0.0200

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00061	REG07170-00062	REG07170-00063
Reg. Lot Number	GLP-0707-18832-S	GLP-0707-18832-S	GLP-0707-18832-S
Material Name	Stine 2788 (A)	Stine 2788 (A)	Stine 2788 (A)
Site Code	SFR	SFR	SFR
Plot ID	101	205	301
Covance LIMS Number	81000029	81000255	81000258
Proximate (%)			
Moisture	11.9	10.8	11.3
Protein	26.0	29.9	26.8
Total Fat	20.0	19.6	20.5
Ash	5.47	5.48	5.77
Carbohydrates	36.6	34.2	35.6
Acid Detergent Fiber (%)	15.0	12.4	14.1
Neutral Detergent Fiber (%)	15.3	14.2	15.6
Lectin (H.U./mg)*	1.78	2.23	2.57
Trypsin Inhibitor (TIU/mg)**	40.5	32.0	29.3
Vitamin E (mg/100g)	2.18	3.76	2.97
Phytic Acid (%)	1.60	1.44	1.70
Raffinose (%)	0.596	0.698	0.685
Stachyose (%)	3.88	3.08	3.33
Isoflavones (µg/g)			
Daidzein	1130	614	1200
Glycitein	149	115	216
Genistein	1380	802	1520
Amino Acids (mg/g)			
Aspartic Acid	32.1	34.5	30.1
Threonine	11.1	11.5	10.6
Serine	14.6	16.2	14.2
Glutamic Acid	50.3	54.5	46.7
Proline	14.3	14.7	12.8
Glycine	12.4	13.3	11.8
Alanine	12.9	13.7	12.3
Cystine	5.18	5.35	4.96
Valine	14.4	15.0	13.4
Methionine	4.55	4.43	4.28
Isoleucine	13.6	14.1	12.5
Leucine	21.9	23.2	20.5
Tyrosine	10.1	10.6	9.60
Phenylalanine	14.6	15.0	13.6
Lysine	19.2	20.2	18.1
Histidine	7.74	8.36	7.25
Arginine	21.3	23.5	19.7
Tryptophan	3.52	3.28	3.12

*H.U. - Hemagglutinating Unit

**TIU - Trypsin Inhibitor Unit

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00061	REG07170-00062	REG07170-00063
Reg. Lot Number	GLP-0707-18832-S	GLP-0707-18832-S	GLP-0707-18832-S
Material Name	Stine 2788 (A)	Stine 2788 (A)	Stine 2788 (A)
Site Code	SFR	SFR	SFR
Plot ID	101	205	301
Covance LIMS Number	81000029	81000255	81000258
Fatty Acids (%)			
8:0 Caprylic	< 0.0200	< 0.0200	< 0.0200
10:0 Capric	< 0.0200	< 0.0200	< 0.0200
12:0 Lauric	< 0.0200	< 0.0200	< 0.0200
14:0 Myristic	< 0.0200	< 0.0200	< 0.0200
14:1 Myristoleic	< 0.0200	< 0.0200	< 0.0200
15:0 Pentadecylic	< 0.0200	< 0.0200	< 0.0200
15:1 10c Pentadecenoic	< 0.0200	< 0.0200	< 0.0200
16:0 Palmitic	1.80	1.73	1.85
16:1 Palmitoleic	< 0.0200	< 0.0200	< 0.0200
17:0 Heptadecanoic	< 0.0200	< 0.0200	< 0.0200
17:1 9c Heptadecenoic	< 0.0200	< 0.0200	< 0.0200
18:0 Stearic	0.912	1.08	0.883
18:1 9t Octadecenoic	< 0.0200	< 0.0200	< 0.0200
18:1 Oleic	4.64	5.07	4.90
18:2 6c,9c Octadecadienoic	< 0.0200	< 0.0200	0.110
18:2 Linoleic	9.87	9.38	9.98
18:2 9c,15c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
20:0 Arachidic	0.0658	0.0782	0.0639
18:3 Gamma Linolenic	< 0.0200	< 0.0200	< 0.0200
20:1 Eicosenoic	0.0323	0.0348	0.0360
18:3 Linolenic	1.50	1.37	1.19
20:2 11c,14c Eicosadienoic	< 0.0200	< 0.0200	< 0.0200
22:0 Behenic	0.0632	0.0683	0.0651
20:3 11c,14c,17c Eicosatrienoic	< 0.0200	< 0.0200	< 0.0200
20:4 Arachidonic	< 0.0200	< 0.0200	< 0.0200
24:0 Lignoceric	0.0254	0.0335	0.0311

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00136	REG07170-00137	REG07170-00138
Reg. Lot Number	GLP-0707-18816-S	GLP-0707-18816-S	GLP-0707-18816-S
Material Name	Channel Bio 3461 (A)	Channel Bio 3461 (A)	Channel Bio 3461 (A)
Site Code	CdT	CdT	CdT
Plot ID	104	203	304
Covance LIMS Number	81000052	81000253	81000290
Proximate (%)			
Moisture	11.3	8.22	8.09
Protein	31.4	33.0	33.5
Total Fat	18.0	17.9	17.4
Ash	5.93	6.14	6.16
Carbohydrates	33.4	34.7	34.9
Acid Detergent Fiber (%)	15.0	15.3	16.4
Neutral Detergent Fiber (%)	15.9	18.6	14.3
Lectin (H.U./mg)*	4.01	3.39	3.21
Trypsin Inhibitor (TIU/mg)**	48.1	44.0	28.2
Vitamin E (mg/100g)	4.52	4.47	4.11
Phytic Acid (%)	1.61	1.30	1.80
Raffinose (%)	0.458	0.387	0.401
Stachyose (%)	2.50	2.15	2.11
Isoflavones (µg/g)			
Daidzein	530	532	642
Glycitein	131	139	198
Genistein	532	548	622
Amino Acids (mg/g)			
Aspartic Acid	37.1	38.9	38.6
Threonine	12.0	12.5	13.0
Serine	15.8	17.8	17.3
Glutamic Acid	58.8	61.8	61.1
Proline	15.9	16.7	16.6
Glycine	14.4	15.0	14.8
Alanine	14.5	15.1	14.9
Cystine	5.54	5.75	5.57
Valine	16.6	17.0	16.8
Methionine	4.88	4.93	4.74
Isoleucine	15.6	15.9	15.8
Leucine	24.7	25.8	25.8
Tyrosine	11.3	11.7	12.0
Phenylalanine	16.5	17.3	17.3
Lysine	21.5	22.5	22.4
Histidine	8.77	9.17	9.07
Arginine	24.4	25.1	25.2
Tryptophan	3.68	3.34	3.46

*H.U. - Hemagglutinating Unit

**TIU - Trypsin Inhibitor Unit

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00136	REG07170-00137	REG07170-00138
Reg. Lot Number	GLP-0707-18816-S	GLP-0707-18816-S	GLP-0707-18816-S
Material Name	Channel Bio 3461 (A)	Channel Bio 3461 (A)	Channel Bio 3461 (A)
Site Code	CdT	CdT	CdT
Plot ID	104	203	304
Covance LIMS Number	81000052	81000253	81000290
Fatty Acids (%)			
8:0 Caprylic	< 0.0200	< 0.0200	< 0.0200
10:0 Capric	< 0.0200	< 0.0200	< 0.0200
12:0 Lauric	< 0.0200	< 0.0200	< 0.0200
14:0 Myristic	< 0.0200	< 0.0200	< 0.0200
14:1 Myristoleic	< 0.0200	< 0.0200	< 0.0200
15:0 Pentadecylic	< 0.0200	< 0.0200	< 0.0200
15:1 10c Pentadecenoic	< 0.0200	< 0.0200	< 0.0200
16:0 Palmitic	1.81	1.81	1.77
16:1 Palmitoleic	< 0.0200	< 0.0200	< 0.0200
17:0 Heptadecanoic	< 0.0200	< 0.0200	< 0.0200
17:1 9c Heptadecenoic	< 0.0200	< 0.0200	< 0.0200
18:0 Stearic	0.847	0.826	0.802
18:1 9t Octadecenoic	< 0.0200	< 0.0200	< 0.0200
18:1 Oleic	4.12	4.09	3.93
18:2 6c,9c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
18:2 Linoleic	8.90	8.85	8.62
18:2 9c,15c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
20:0 Arachidic	0.0667	0.0646	0.0631
18:3 Gamma Linolenic	< 0.0200	< 0.0200	< 0.0200
20:1 Eicosenoic	0.0385	0.0363	0.0352
18:3 Linolenic	1.36	1.36	1.33
20:2 11c,14c Eicosadienoic	< 0.0200	< 0.0200	< 0.0200
22:0 Behenic	0.0641	0.0600	0.0579
20:3 11c,14c,17c Eicosatrienoic	< 0.0200	< 0.0200	< 0.0200
20:4 Arachidonic	< 0.0200	< 0.0200	< 0.0200
24:0 Lignoceric	0.0297	0.0321	0.0270

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00130	REG07170-00131	REG07170-00132
Reg. Lot Number	GLP-0707-18827-S	GLP-0707-18827-S	GLP-0707-18827-S
Material Name	NK 32Z3	NK 32Z3	NK 32Z3
Site Code	CdT	CdT	CdT
Plot ID	102	205	303
Covance LIMS Number	81000054	81000274	81000267
Proximate (%)			
Moisture	9.86	7.95	7.06
Protein	30.2	28.8	30.3
Total Fat	19.9	19.4	20.6
Ash	5.62	5.21	5.54
Carbohydrates	34.4	38.6	36.5
Acid Detergent Fiber (%)	14.9	15.7	13.9
Neutral Detergent Fiber (%)	15.7	17.8	17.0
Lectin (H.U./mg)*	1.99	1.94	7.53
Trypsin Inhibitor (TIU/mg)**	41.4	26.2	36.5
Vitamin E (mg/100g)	4.01	4.57	4.65
Phytic Acid (%)	1.58	1.52	1.70
Raffinose (%)	0.489	0.470	0.570
Stachyose (%)	3.13	2.89	3.00
Isoflavones (µg/g)			
Daidzein	455	384	522
Glycitein	149	143	193
Genistein	445	410	486
Amino Acids (mg/g)			
Aspartic Acid	34.5	38.5	35.2
Threonine	11.2	12.0	11.2
Serine	14.8	16.1	15.2
Glutamic Acid	54.2	61.7	55.8
Proline	15.0	16.6	15.4
Glycine	13.6	14.9	13.9
Alanine	13.7	14.9	14.0
Cystine	5.28	5.51	5.52
Valine	15.7	17.5	16.0
Methionine	4.79	5.16	4.91
Isoleucine	14.7	16.4	15.1
Leucine	23.3	25.9	23.9
Tyrosine	10.5	11.8	10.6
Phenylalanine	15.5	17.4	15.9
Lysine	20.3	22.1	20.8
Histidine	8.21	9.04	8.58
Arginine	22.6	25.7	23.1
Tryptophan	3.29	3.81	3.77

*H.U. - Hemagglutinating Unit

**TIU - Trypsin Inhibitor Unit

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00130	REG07170-00131	REG07170-00132
Reg. Lot Number	GLP-0707-18827-S	GLP-0707-18827-S	GLP-0707-18827-S
Material Name	NK 32Z3	NK 32Z3	NK 32Z3
Site Code	CdT	CdT	CdT
Plot ID	102	205	303
Covance LIMS Number	81000054	81000274	81000267
Fatty Acids (%)			
8:0 Caprylic	< 0.0200	< 0.0200	< 0.0200
10:0 Capric	< 0.0200	< 0.0200	< 0.0200
12:0 Lauric	< 0.0200	< 0.0200	< 0.0200
14:0 Myristic	< 0.0200	< 0.0200	< 0.0200
14:1 Myristoleic	< 0.0200	< 0.0200	< 0.0200
15:0 Pentadecylic	< 0.0200	< 0.0200	< 0.0200
15:1 10c Pentadecenoic	< 0.0200	< 0.0200	< 0.0200
16:0 Palmitic	1.92	1.87	1.98
16:1 Palmitoleic	< 0.0200	< 0.0200	< 0.0200
17:0 Heptadecanoic	< 0.0200	< 0.0200	< 0.0200
17:1 9c Heptadecenoic	< 0.0200	< 0.0200	< 0.0200
18:0 Stearic	0.922	0.938	0.964
18:1 9t Octadecenoic	< 0.0200	< 0.0200	< 0.0200
18:1 Oleic	4.83	4.77	5.12
18:2 6c,9c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
18:2 Linoleic	9.80	9.53	10.1
18:2 9c,15c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
20:0 Arachidic	0.0700	0.0732	0.0726
18:3 Gamma Linolenic	< 0.0200	< 0.0200	< 0.0200
20:1 Eicosenoic	0.0379	0.0380	0.0417
18:3 Linolenic	1.40	1.34	1.43
20:2 11c,14c Eicosadienoic	< 0.0200	< 0.0200	< 0.0200
22:0 Behenic	0.0638	0.0641	0.0662
20:3 11c,14c,17c Eicosatrienoic	< 0.0200	< 0.0200	< 0.0200
20:4 Arachidonic	< 0.0200	< 0.0200	< 0.0200
24:0 Lignoceric	0.0290	0.0301	0.0324

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00139	REG07170-00140	REG07170-00141
Reg. Lot Number	GLP-0707-18831-S	GLP-0707-18831-S	GLP-0707-18831-S
Material Name	Stewart 3454 (A)	Stewart 3454 (A)	Stewart 3454 (A)
Site Code	CdT	CdT	CdT
Plot ID	105	202	302
Covance LIMS Number	81000031	81000254	81000289
Proximate (%)			
Moisture	11.4	8.00	7.31
Protein	30.6	29.3	28.7
Total Fat	19.6	21.6	20.8
Ash	5.07	6.01	5.86
Carbohydrates	33.3	35.1	37.3
Acid Detergent Fiber (%)	15.2	13.1	19.7
Neutral Detergent Fiber (%)	11.8	17.5	14.6
Lectin (H.U./mg)*	2.70	2.75	2.53
Trypsin Inhibitor (TIU/mg)**	32.5	39.9	28.5
Vitamin E (mg/100g)	3.81	4.47	4.01
Phytic Acid (%)	1.37	1.47	1.82
Raffinose (%)	0.542	0.534	0.496
Stachyose (%)	3.49	2.65	2.42
Isoflavones (µg/g)			
Daidzein	284	486	451
Glycitein	19.2	118	101
Genistein	384	586	555
Amino Acids (mg/g)			
Aspartic Acid	37.8	33.1	34.2
Threonine	12.3	11.0	11.5
Serine	17.0	15.6	15.7
Glutamic Acid	60.4	51.4	53.6
Proline	16.8	14.4	15.0
Glycine	14.0	12.9	13.3
Alanine	14.2	13.0	13.5
Cystine	5.31	5.61	5.72
Valine	16.4	14.2	15.0
Methionine	4.62	4.56	4.61
Isoleucine	15.5	13.4	14.2
Leucine	25.1	22.0	23.0
Tyrosine	11.6	10.3	10.8
Phenylalanine	16.9	14.7	15.3
Lysine	21.5	19.5	20.2
Histidine	8.82	7.87	8.23
Arginine	25.2	21.4	22.1
Tryptophan	3.96	3.08	3.11

*H.U. - Hemagglutinating Unit

**TIU - Trypsin Inhibitor Unit

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00139	REG07170-00140	REG07170-00141
Reg. Lot Number	GLP-0707-18831-S	GLP-0707-18831-S	GLP-0707-18831-S
Material Name	Stewart 3454 (A)	Stewart 3454 (A)	Stewart 3454 (A)
Site Code	CdT	CdT	CdT
Plot ID	105	202	302
Covance LIMS Number	81000031	81000254	81000289
Fatty Acids (%)			
8:0 Caprylic	< 0.0200	< 0.0200	< 0.0200
10:0 Capric	< 0.0200	< 0.0200	< 0.0200
12:0 Lauric	< 0.0200	< 0.0200	< 0.0200
14:0 Myristic	< 0.0200	< 0.0200	< 0.0200
14:1 Myristoleic	< 0.0200	< 0.0200	< 0.0200
15:0 Pentadecylic	< 0.0200	< 0.0200	< 0.0200
15:1 10c Pentadecenoic	< 0.0200	< 0.0200	< 0.0200
16:0 Palmitic	1.73	1.93	1.84
16:1 Palmitoleic	< 0.0200	< 0.0200	< 0.0200
17:0 Heptadecanoic	< 0.0200	< 0.0200	< 0.0200
17:1 9c Heptadecenoic	< 0.0200	< 0.0200	< 0.0200
18:0 Stearic	0.916	0.905	0.857
18:1 9t Octadecenoic	< 0.0200	< 0.0200	< 0.0200
18:1 Oleic	4.83	5.32	4.99
18:2 6c,9c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
18:2 Linoleic	9.62	10.7	10.2
18:2 9c,15c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
20:0 Arachidic	0.0679	0.0684	0.0652
18:3 Gamma Linolenic	< 0.0200	< 0.0200	< 0.0200
20:1 Eicosenoic	0.0374	0.0426	0.0413
18:3 Linolenic	1.31	1.48	1.43
20:2 11c,14c Eicosadienoic	< 0.0200	< 0.0200	< 0.0200
22:0 Behenic	0.0612	0.0614	0.0583
20:3 11c,14c,17c Eicosatrienoic	< 0.0200	< 0.0200	< 0.0200
20:4 Arachidonic	< 0.0200	< 0.0200	< 0.0200
24:0 Lignoceric	0.0265	0.0324	0.0286

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00133	REG07170-00134	REG07170-00135
Reg. Lot Number	GLP-0707-18833-S	GLP-0707-18833-S	GLP-0707-18833-S
Material Name	Stine 3300-0 (A)	Stine 3300-0 (A)	Stine 3300-0 (A)
Site Code	CdT	CdT	CdT
Plot ID	106	204	305
Covance LIMS Number	81000063	81000265	81000262
Proximate (%)			
Moisture	11.0	7.37	7.42
Protein	30.2	33.1	33.8
Total Fat	19.2	19.5	18.7
Ash	5.48	5.67	5.57
Carbohydrates	34.1	34.4	34.5
Acid Detergent Fiber (%)	14.9	13.7	14.8
Neutral Detergent Fiber (%)	18.1	17.2	17.6
Lectin (H.U./mg)*	3.75	3.23	3.53
Trypsin Inhibitor (TIU/mg)**	28.0	29.8	30.5
Vitamin E (mg/100g)	2.48	2.73	2.47
Phytic Acid (%)	1.60	1.50	1.61
Raffinose (%)	0.464	0.518	0.482
Stachyose (%)	2.80	2.76	2.70
Isoflavones (µg/g)			
Daidzein	712	673	723
Glycitein	148	153	148
Genistein	574	524	587
Amino Acids (mg/g)			
Aspartic Acid	34.8	37.5	41.1
Threonine	11.2	12.0	12.6
Serine	13.9	16.0	17.1
Glutamic Acid	54.5	59.6	65.9
Proline	14.8	16.6	17.6
Glycine	13.7	14.7	15.7
Alanine	13.9	14.8	16.0
Cystine	5.31	5.03	5.47
Valine	16.0	17.1	18.6
Methionine	4.79	4.80	5.22
Isoleucine	14.9	16.0	17.5
Leucine	23.4	25.3	27.6
Tyrosine	10.6	11.6	12.6
Phenylalanine	15.6	17.0	18.6
Lysine	20.4	21.9	23.5
Histidine	8.19	8.99	9.74
Arginine	22.8	25.3	27.9
Tryptophan	3.32	3.76	4.12

*H.U. - Hemagglutinating Unit

**TIU - Trypsin Inhibitor Unit

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00133	REG07170-00134	REG07170-00135
Reg. Lot Number	GLP-0707-18833-S	GLP-0707-18833-S	GLP-0707-18833-S
Material Name	Stine 3300-0 (A)	Stine 3300-0 (A)	Stine 3300-0 (A)
Site Code	CdT	CdT	CdT
Plot ID	106	204	305
Covance LIMS Number	81000063	81000265	81000262
Fatty Acids (%)			
8:0 Caprylic	< 0.0200	< 0.0200	< 0.0200
10:0 Capric	< 0.0200	< 0.0200	< 0.0200
12:0 Lauric	< 0.0200	< 0.0200	< 0.0200
14:0 Myristic	< 0.0200	< 0.0200	< 0.0200
14:1 Myristoleic	< 0.0200	< 0.0200	< 0.0200
15:0 Pentadecylic	< 0.0200	< 0.0200	< 0.0200
15:1 10c Pentadecenoic	< 0.0200	< 0.0200	< 0.0200
16:0 Palmitic	1.97	2.00	1.91
16:1 Palmitoleic	< 0.0200	< 0.0200	< 0.0200
17:0 Heptadecanoic	< 0.0200	0.0217	< 0.0200
17:1 9c Heptadecenoic	< 0.0200	< 0.0200	< 0.0200
18:0 Stearic	0.915	0.955	0.892
18:1 9t Octadecenoic	< 0.0200	< 0.0200	< 0.0200
18:1 Oleic	4.50	4.49	4.20
18:2 6c,9c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
18:2 Linoleic	9.50	9.45	9.15
18:2 9c,15c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
20:0 Arachidic	0.0709	0.0722	0.0675
18:3 Gamma Linolenic	< 0.0200	< 0.0200	< 0.0200
20:1 Eicosenoic	0.0379	0.0358	0.0345
18:3 Linolenic	1.36	1.35	1.32
20:2 11c,14c Eicosadienoic	< 0.0200	< 0.0200	< 0.0200
22:0 Behenic	0.0629	0.0608	0.0588
20:3 11c,14c,17c Eicosatrienoic	< 0.0200	< 0.0200	< 0.0200
20:4 Arachidonic	< 0.0200	< 0.0200	< 0.0200
24:0 Lignoceric	0.0298	0.0303	0.0282

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00202	REG07170-00203	REG07170-00204
Reg. Lot Number	GLP-0707-18818-S	GLP-0707-18818-S	GLP-0707-18818-S
Material Name	Croplan 3596STS	Croplan 3596STS	Croplan 3596STS
Site Code	MEL	MEL	MEL
Plot ID	104	203	305
Covance LIMS Number	81000035	81000279	81000287
Proximate (%)			
Moisture	11.1	7.97	7.41
Protein	32.6	32.4	32.7
Total Fat	17.2	18.7	18.5
Ash	5.59	6.27	6.18
Carbohydrates	33.5	34.7	35.2
Acid Detergent Fiber (%)	13.4	14.8	13.5
Neutral Detergent Fiber (%)	14.5	12.9	13.7
Lectin (H.U./mg)*	2.39	3.09	2.76
Trypsin Inhibitor (TIU/mg)**	28.7	38.4	40.9
Vitamin E (mg/100g)	2.64	2.87	2.55
Phytic Acid (%)	1.73	1.94	1.96
Raffinose (%)	0.503	0.460	0.496
Stachyose (%)	3.21	3.00	2.94
Isoflavones (µg/g)			
Daidzein	674	835	1000
Glycitein	163	248	213
Genistein	703	859	976
Amino Acids (mg/g)			
Aspartic Acid	37.7	37.2	37.7
Threonine	12.7	12.6	12.8
Serine	16.8	17.7	17.0
Glutamic Acid	60.5	58.8	59.4
Proline	15.9	16.2	16.0
Glycine	14.4	14.3	14.6
Alanine	14.6	14.6	14.8
Cystine	5.30	5.68	5.41
Valine	16.8	15.9	16.7
Methionine	4.91	5.02	4.81
Isoleucine	15.7	15.0	15.6
Leucine	25.5	25.2	25.6
Tyrosine	11.6	11.9	11.9
Phenylalanine	17.1	16.9	17.0
Lysine	21.7	21.8	22.0
Histidine	8.74	8.63	8.75
Arginine	25.2	24.5	24.9
Tryptophan	3.75	3.44	3.33

*H.U. - Hemagglutinating Unit

**TIU - Trypsin Inhibitor Unit

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00202	REG07170-00203	REG07170-00204
Reg. Lot Number	GLP-0707-18818-S	GLP-0707-18818-S	GLP-0707-18818-S
Material Name	Croplan 3596STS	Croplan 3596STS	Croplan 3596STS
Site Code	MEL	MEL	MEL
Plot ID	104	203	305
Covance LIMS Number	81000035	81000279	81000287
Fatty Acids (%)			
8:0 Caprylic	< 0.0200	< 0.0200	< 0.0200
10:0 Capric	< 0.0200	< 0.0200	< 0.0200
12:0 Lauric	< 0.0200	< 0.0200	< 0.0200
14:0 Myristic	< 0.0200	< 0.0200	< 0.0200
14:1 Myristoleic	< 0.0200	< 0.0200	< 0.0200
15:0 Pentadecylic	< 0.0200	< 0.0200	< 0.0200
15:1 10c Pentadecenoic	< 0.0200	< 0.0200	< 0.0200
16:0 Palmitic	1.75	1.97	1.97
16:1 Palmitoleic	< 0.0200	< 0.0200	< 0.0200
17:0 Heptadecanoic	< 0.0200	< 0.0200	< 0.0200
17:1 9c Heptadecenoic	< 0.0200	< 0.0200	< 0.0200
18:0 Stearic	0.909	0.948	0.895
18:1 9t Octadecenoic	< 0.0200	< 0.0200	< 0.0200
18:1 Oleic	3.80	4.28	4.13
18:2 6c,9c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
18:2 Linoleic	8.41	9.34	9.36
18:2 9c,15c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
20:0 Arachidic	0.0679	0.0710	0.0675
18:3 Gamma Linolenic	< 0.0200	< 0.0200	< 0.0200
20:1 Eicosenoic	0.0296	0.0339	0.0338
18:3 Linolenic	1.21	1.36	1.39
20:2 11c,14c Eicosadienoic	< 0.0200	< 0.0200	< 0.0200
22:0 Behenic	0.0585	0.0641	0.0617
20:3 11c,14c,17c Eicosatrienoic	< 0.0200	< 0.0200	< 0.0200
20:4 Arachidonic	< 0.0200	< 0.0200	< 0.0200
24:0 Lignoceric	0.0237	0.0277	0.0265

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00205	REG07170-00206	REG07170-00207
Reg. Lot Number	GLP-0707-18820-S	GLP-0707-18820-S	GLP-0707-18820-S
Material Name	Garst 3585N (A)	Garst 3585N (A)	Garst 3585N (A)
Site Code	MEL	MEL	MEL
Plot ID	106	205	303
Covance LIMS Number	81000028	81000275	81000261
Proximate (%)			
Moisture	11.2	8.31	7.94
Protein	31.2	28.0	34.1
Total Fat	19.7	20.4	20.0
Ash	5.62	5.97	5.67
Carbohydrates	32.3	37.3	32.3
Acid Detergent Fiber (%)	13.9	13.1	14.3
Neutral Detergent Fiber (%)	14.9	16.9	13.1
Lectin (H.U./mg)*	1.71	2.21	4.27
Trypsin Inhibitor (TIU/mg)**	45.6	55.4	44.8
Vitamin E (mg/100g)	3.55	4.17	4.23
Phytic Acid (%)	1.67	2.02	1.46
Raffinose (%)	0.375	0.367	0.414
Stachyose (%)	3.55	2.88	2.90
Isoflavones (µg/g)			
Daidzein	656	748	785
Glycitein	87.3	223	218
Genistein	918	999	997
Amino Acids (mg/g)			
Aspartic Acid	36.5	33.4	39.6
Threonine	12.0	11.7	12.0
Serine	16.5	15.2	16.9
Glutamic Acid	57.6	52.2	63.7
Proline	15.9	14.5	16.9
Glycine	13.8	12.8	15.1
Alanine	13.9	13.0	15.1
Cystine	5.42	5.91	5.93
Valine	15.9	14.0	17.6
Methionine	4.66	5.03	5.16
Isoleucine	15.1	13.3	16.6
Leucine	24.3	21.9	26.3
Tyrosine	11.3	10.4	11.7
Phenylalanine	16.4	14.8	17.8
Lysine	20.9	19.1	22.5
Histidine	8.26	7.33	8.97
Arginine	24.0	21.3	26.0
Tryptophan	3.64	3.73	4.11

*H.U. - Hemagglutinating Unit

**TIU - Trypsin Inhibitor Unit

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00205	REG07170-00206	REG07170-00207
Reg. Lot Number	GLP-0707-18820-S	GLP-0707-18820-S	GLP-0707-18820-S
Material Name	Garst 3585N (A)	Garst 3585N (A)	Garst 3585N (A)
Site Code	MEL	MEL	MEL
Plot ID	106	205	303
Covance LIMS Number	81000028	81000275	81000261
Fatty Acids (%)			
8:0 Caprylic	< 0.0200	< 0.0200	< 0.0200
10:0 Capric	< 0.0200	< 0.0200	< 0.0200
12:0 Lauric	< 0.0200	< 0.0200	< 0.0200
14:0 Myristic	< 0.0200	< 0.0200	< 0.0200
14:1 Myristoleic	< 0.0200	< 0.0200	< 0.0200
15:0 Pentadecylic	< 0.0200	< 0.0200	< 0.0200
15:1 10c Pentadecenoic	< 0.0200	< 0.0200	< 0.0200
16:0 Palmitic	1.81	1.90	1.84
16:1 Palmitoleic	< 0.0200	< 0.0200	< 0.0200
17:0 Heptadecanoic	< 0.0200	< 0.0200	0.0203
17:1 9c Heptadecenoic	< 0.0200	< 0.0200	< 0.0200
18:0 Stearic	0.898	0.919	0.913
18:1 9t Octadecenoic	< 0.0200	< 0.0200	< 0.0200
18:1 Oleic	4.50	4.82	4.62
18:2 6c,9c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
18:2 Linoleic	9.86	10.4	10.2
18:2 9c,15c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
20:0 Arachidic	0.0659	0.0680	0.0675
18:3 Gamma Linolenic	< 0.0200	< 0.0200	< 0.0200
20:1 Eicosenoic	0.0355	0.0389	0.0362
18:3 Linolenic	1.41	1.50	1.45
20:2 11c,14c Eicosadienoic	< 0.0200	< 0.0200	< 0.0200
22:0 Behenic	0.0624	0.0657	0.0636
20:3 11c,14c,17c Eicosatrienoic	< 0.0200	< 0.0200	< 0.0200
20:4 Arachidonic	< 0.0200	< 0.0200	< 0.0200
24:0 Lignoceric	0.0259	0.0304	0.0273

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00208	REG07170-00209	REG07170-00210
Reg. Lot Number	GLP-0707-18829-S	GLP-0707-18829-S	GLP-0707-18829-S
Material Name	Pioneer 93B52 (A)	Pioneer 93B52 (A)	Pioneer 93B52 (A)
Site Code	MEL	MEL	MEL
Plot ID	105	201	301
Covance LIMS Number	81000033	81000260	81000281
Proximate (%)			
Moisture	10.7	6.93	7.68
Protein	31.2	32.9	30.9
Total Fat	19.2	20.2	20.5
Ash	5.81	6.02	6.07
Carbohydrates	33.1	34.0	34.9
Acid Detergent Fiber (%)	14.7	14.0	15.6
Neutral Detergent Fiber (%)	14.3	15.7	13.0
Lectin (H.U./mg)*	2.46	3.39	5.52
Trypsin Inhibitor (TIU/mg)**	32.2	28.4	43.3
Vitamin E (mg/100g)	3.68	4.06	4.23
Phytic Acid (%)	1.81	1.80	2.09
Raffinose (%)	0.413	0.477	0.434
Stachyose (%)	2.92	3.11	2.64
Isoflavones (µg/g)			
Daidzein	868	1170	865
Glycitein	104	115	69.8
Genistein	909	1190	1020
Amino Acids (mg/g)			
Aspartic Acid	36.2	38.1	35.3
Threonine	11.9	12.7	12.2
Serine	16.0	17.3	16.7
Glutamic Acid	57.4	60.6	55.5
Proline	15.6	16.3	15.2
Glycine	13.7	14.6	13.7
Alanine	14.0	14.7	13.9
Cystine	5.26	5.24	5.17
Valine	16.2	16.7	14.9
Methionine	4.66	4.80	4.53
Isoleucine	15.3	15.7	14.2
Leucine	24.4	25.6	23.8
Tyrosine	11.1	11.7	11.2
Phenylalanine	16.4	17.2	16.0
Lysine	21.1	22.0	20.8
Histidine	8.36	8.80	8.20
Arginine	23.8	25.5	23.4
Tryptophan	3.71	3.65	3.30

*H.U. - Hemagglutinating Unit

**TIU - Trypsin Inhibitor Unit

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00208	REG07170-00209	REG07170-00210
Reg. Lot Number	GLP-0707-18829-S	GLP-0707-18829-S	GLP-0707-18829-S
Material Name	Pioneer 93B52 (A)	Pioneer 93B52 (A)	Pioneer 93B52 (A)
Site Code	MEL	MEL	MEL
Plot ID	105	201	301
Covance LIMS Number	81000033	81000260	81000281
Fatty Acids (%)			
8:0 Caprylic	< 0.0200	< 0.0200	< 0.0200
10:0 Capric	< 0.0200	< 0.0200	< 0.0200
12:0 Lauric	< 0.0200	< 0.0200	< 0.0200
14:0 Myristic	< 0.0200	< 0.0200	< 0.0200
14:1 Myristoleic	< 0.0200	< 0.0200	< 0.0200
15:0 Pentadecylic	< 0.0200	< 0.0200	< 0.0200
15:1 10c Pentadecenoic	< 0.0200	< 0.0200	< 0.0200
16:0 Palmitic	1.84	1.96	1.99
16:1 Palmitoleic	< 0.0200	< 0.0200	< 0.0200
17:0 Heptadecanoic	< 0.0200	0.0201	0.0202
17:1 9c Heptadecenoic	< 0.0200	< 0.0200	< 0.0200
18:0 Stearic	0.872	0.887	0.910
18:1 9t Octadecenoic	< 0.0200	< 0.0200	< 0.0200
18:1 Oleic	4.44	4.72	4.87
18:2 6c,9c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
18:2 Linoleic	9.38	10.3	10.3
18:2 9c,15c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
20:0 Arachidic	0.0648	0.0662	0.0701
18:3 Gamma Linolenic	< 0.0200	< 0.0200	< 0.0200
20:1 Eicosenoic	0.0356	0.0366	0.0383
18:3 Linolenic	1.39	1.52	1.53
20:2 11c,14c Eicosadienoic	< 0.0200	< 0.0200	< 0.0200
22:0 Behenic	0.0609	0.0652	0.0653
20:3 11c,14c,17c Eicosatrienoic	< 0.0200	< 0.0200	< 0.0200
20:4 Arachidonic	< 0.0200	< 0.0200	< 0.0200
24:0 Lignoceric	0.0250	0.0302	0.0286

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00211	REG07170-00212	REG07170-00213
Reg. Lot Number	GLP-0707-18830-S	GLP-0707-18830-S	GLP-0707-18830-S
Material Name	Quality Plus 365C	Quality Plus 365C	Quality Plus 365C
Site Code	MEL	MEL	MEL
Plot ID	102	206	302
Covance LIMS Number	81000047	81000264	81000268
Proximate (%)			
Moisture	10.7	7.45	6.89
Protein	30.9	33.6	35.3
Total Fat	18.6	18.5	17.7
Ash	6.09	5.77	5.69
Carbohydrates	33.7	34.7	34.4
Acid Detergent Fiber (%)	14.7	12.2	13.1
Neutral Detergent Fiber (%)	15.2	14.6	15.3
Lectin (H.U./mg)*	1.41	3.35	2.97
Trypsin Inhibitor (TIU/mg)**	42.5	33.5	36.5
Vitamin E (mg/100g)	3.67	3.27	3.77
Phytic Acid (%)	1.95	1.75	1.79
Raffinose (%)	0.466	0.527	0.484
Stachyose (%)	3.00	3.04	2.71
Isoflavones (µg/g)			
Daidzein	733	879	863
Glycitein	154	221	198
Genistein	814	896	800
Amino Acids (mg/g)			
Aspartic Acid	36.4	38.9	40.3
Threonine	12.4	12.2	12.2
Serine	16.6	16.5	16.8
Glutamic Acid	57.8	62.8	65.6
Proline	15.5	16.6	17.3
Glycine	14.1	15.2	15.5
Alanine	14.4	15.2	15.6
Cystine	5.50	5.61	5.71
Valine	15.9	17.6	18.2
Methionine	4.79	5.10	5.32
Isoleucine	14.9	16.5	17.0
Leucine	24.4	26.1	26.8
Tyrosine	11.3	11.7	12.0
Phenylalanine	16.5	17.7	18.3
Lysine	21.1	22.4	22.8
Histidine	8.32	8.93	9.25
Arginine	24.4	26.3	28.0
Tryptophan	3.53	3.91	3.87

*H.U. - Hemagglutinating Unit

**TIU - Trypsin Inhibitor Unit

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00211	REG07170-00212	REG07170-00213
Reg. Lot Number	GLP-0707-18830-S	GLP-0707-18830-S	GLP-0707-18830-S
Material Name	Quality Plus 365C	Quality Plus 365C	Quality Plus 365C
Site Code	MEL	MEL	MEL
Plot ID	102	206	302
Covance LIMS Number	81000047	81000264	81000268
Fatty Acids (%)			
8:0 Caprylic	< 0.0200	< 0.0200	< 0.0200
10:0 Capric	< 0.0200	< 0.0200	< 0.0200
12:0 Lauric	< 0.0200	< 0.0200	< 0.0200
14:0 Myristic	< 0.0200	< 0.0200	< 0.0200
14:1 Myristoleic	< 0.0200	< 0.0200	< 0.0200
15:0 Pentadecylic	< 0.0200	< 0.0200	< 0.0200
15:1 10c Pentadecenoic	< 0.0200	< 0.0200	< 0.0200
16:0 Palmitic	1.82	1.80	1.64
16:1 Palmitoleic	0.0202	< 0.0200	< 0.0200
17:0 Heptadecanoic	< 0.0200	< 0.0200	< 0.0200
17:1 9c Heptadecenoic	< 0.0200	< 0.0200	< 0.0200
18:0 Stearic	1.02	0.993	1.05
18:1 9t Octadecenoic	< 0.0200	< 0.0200	< 0.0200
18:1 Oleic	4.47	4.31	4.10
18:2 6c,9c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
18:2 Linoleic	9.15	9.16	8.43
18:2 9c,15c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
20:0 Arachidic	0.0798	0.0731	0.0763
18:3 Gamma Linolenic	< 0.0200	< 0.0200	< 0.0200
20:1 Eicosenoic	0.0332	0.0279	0.0265
18:3 Linolenic	1.33	1.32	1.20
20:2 11c,14c Eicosadienoic	< 0.0200	< 0.0200	< 0.0200
22:0 Behenic	0.0746	0.0693	0.0715
20:3 11c,14c,17c Eicosatrienoic	< 0.0200	< 0.0200	< 0.0200
20:4 Arachidonic	< 0.0200	< 0.0200	< 0.0200
24:0 Lignoceric	0.0313	0.0263	0.0274

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00277	REG07170-00278	REG07170-00279
Reg. Lot Number	GLP-0707-18817-S	GLP-0707-18817-S	GLP-0707-18817-S
Material Name	Channel Bio 37002 (A)	Channel Bio 37002 (A)	Channel Bio 37002 (A)
Site Code	QUI	QUI	QUI
Plot ID	104	206	304
Covance LIMS Number	81000051	81000256	81000285
Proximate (%)			
Moisture	9.55	8.10	7.53
Protein	35.6	35.2	33.6
Total Fat	16.8	16.5	17.7
Ash	5.70	5.92	5.94
Carbohydrates	32.4	34.3	35.2
Acid Detergent Fiber (%)	14.8	14.2	18.1
Neutral Detergent Fiber (%)	16.3	17.2	13.1
Lectin (H.U./mg)*	1.45	2.46	1.28
Trypsin Inhibitor (TIU/mg)**	25.9	24.8	27.0
Vitamin E (mg/100g)	4.03	3.61	3.79
Phytic Acid (%)	1.63	1.36	2.10
Raffinose (%)	0.571	0.554	0.434
Stachyose (%)	2.60	2.34	2.57
Isoflavones (µg/g)			
Daidzein	409	488	507
Glycitein	94.3	140	125
Genistein	457	530	574
Amino Acids (mg/g)			
Aspartic Acid	40.6	40.5	39.3
Threonine	12.7	12.6	12.8
Serine	18.4	18.5	17.9
Glutamic Acid	65.2	64.8	63.0
Proline	17.2	17.0	16.9
Glycine	15.4	15.3	15.1
Alanine	15.9	15.7	15.2
Cystine	5.50	5.36	5.44
Valine	17.4	17.0	17.0
Methionine	5.11	5.09	4.77
Isoleucine	16.4	16.1	16.1
Leucine	26.8	26.3	26.3
Tyrosine	12.3	11.6	11.5
Phenylalanine	18.3	18.0	17.8
Lysine	22.6	22.4	22.5
Histidine	9.55	9.30	9.07
Arginine	28.7	28.6	26.6
Tryptophan	4.09	3.75	3.45

*H.U. - Hemagglutinating Unit

**TIU - Trypsin Inhibitor Unit

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00277	REG07170-00278	REG07170-00279
Reg. Lot Number	GLP-0707-18817-S	GLP-0707-18817-S	GLP-0707-18817-S
Material Name	Channel Bio 37002 (A)	Channel Bio 37002 (A)	Channel Bio 37002 (A)
Site Code	QUI	QUI	QUI
Plot ID	104	206	304
Covance LIMS Number	81000051	81000256	81000285
Fatty Acids (%)			
8:0 Caprylic	< 0.0200	< 0.0200	< 0.0200
10:0 Capric	< 0.0200	< 0.0200	< 0.0200
12:0 Lauric	< 0.0200	< 0.0200	< 0.0200
14:0 Myristic	< 0.0200	< 0.0200	< 0.0200
14:1 Myristoleic	< 0.0200	< 0.0200	< 0.0200
15:0 Pentadecylic	< 0.0200	< 0.0200	< 0.0200
15:1 10c Pentadecenoic	< 0.0200	< 0.0200	< 0.0200
16:0 Palmitic	1.50	1.50	1.64
16:1 Palmitoleic	< 0.0200	< 0.0200	< 0.0200
17:0 Heptadecanoic	< 0.0200	< 0.0200	< 0.0200
17:1 9c Heptadecenoic	< 0.0200	< 0.0200	< 0.0200
18:0 Stearic	1.16	1.07	0.983
18:1 9t Octadecenoic	< 0.0200	< 0.0200	< 0.0200
18:1 Oleic	4.26	4.09	4.52
18:2 6c,9c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
18:2 Linoleic	7.82	7.90	8.46
18:2 9c,15c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
20:0 Arachidic	0.0863	0.0772	0.0728
18:3 Gamma Linolenic	< 0.0200	< 0.0200	< 0.0200
20:1 Eicosenoic	0.0293	0.0274	0.0311
18:3 Linolenic	1.12	1.06	1.10
20:2 11c,14c Eicosadienoic	< 0.0200	< 0.0200	< 0.0200
22:0 Behenic	0.0737	0.0680	0.0650
20:3 11c,14c,17c Eicosatrienoic	< 0.0200	< 0.0200	< 0.0200
20:4 Arachidonic	< 0.0200	< 0.0200	< 0.0200
24:0 Lignoceric	0.0337	0.0280	0.0285

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00280	REG07170-00281	REG07170-00282
Reg. Lot Number	GLP-0707-18825-S	GLP-0707-18825-S	GLP-0707-18825-S
Material Name	Lewis 372 (A)	Lewis 372 (A)	Lewis 372 (A)
Site Code	QUI	QUI	QUI
Plot ID	103	205	306
Covance LIMS Number	81000048	81000270	81000271
Proximate (%)			
Moisture	9.80	10.1	7.77
Protein	35.5	34.3	35.3
Total Fat	18.7	18.5	18.7
Ash	5.56	5.89	5.95
Carbohydrates	30.4	31.2	32.3
Acid Detergent Fiber (%)	14.0	12.2	13.3
Neutral Detergent Fiber (%)	16.7	14.3	16.0
Lectin (H.U./mg)*	1.81	1.99	2.17
Trypsin Inhibitor (TIU/mg)**	28.7	30.3	31.1
Vitamin E (mg/100g)	3.72	2.95	3.30
Phytic Acid (%)	1.72	1.91	2.03
Raffinose (%)	0.588	0.577	0.548
Stachyose (%)	2.34	2.58	2.23
Isoflavones (µg/g)			
Daidzein	468	635	635
Glycitein	95.4	131	162
Genistein	521	699	656
Amino Acids (mg/g)			
Aspartic Acid	41.4	39.7	43.9
Threonine	13.2	11.8	12.8
Serine	18.5	16.4	17.7
Glutamic Acid	67.1	64.2	71.3
Proline	17.8	17.0	18.7
Glycine	15.6	15.3	16.5
Alanine	15.6	15.1	16.4
Cystine	5.55	5.60	5.77
Valine	18.1	17.9	19.6
Methionine	5.13	5.10	5.47
Isoleucine	17.2	16.9	18.4
Leucine	27.9	26.6	29.0
Tyrosine	12.5	11.1	12.7
Phenylalanine	18.7	17.7	19.5
Lysine	23.2	22.3	24.3
Histidine	9.37	9.05	9.87
Arginine	28.0	26.4	29.8
Tryptophan	4.30	3.91	4.26

*H.U. - Hemagglutinating Unit

**TIU - Trypsin Inhibitor Unit

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00280	REG07170-00281	REG07170-00282
Reg. Lot Number	GLP-0707-18825-S	GLP-0707-18825-S	GLP-0707-18825-S
Material Name	Lewis 372 (A)	Lewis 372 (A)	Lewis 372 (A)
Site Code	QUI	QUI	QUI
Plot ID	103	205	306
Covance LIMS Number	81000048	81000270	81000271
Fatty Acids (%)			
8:0 Caprylic	< 0.0200	< 0.0200	< 0.0200
10:0 Capric	< 0.0200	< 0.0200	< 0.0200
12:0 Lauric	< 0.0200	< 0.0200	< 0.0200
14:0 Myristic	< 0.0200	< 0.0200	< 0.0200
14:1 Myristoleic	< 0.0200	< 0.0200	< 0.0200
15:0 Pentadecylic	< 0.0200	< 0.0200	< 0.0200
15:1 10c Pentadecenoic	< 0.0200	< 0.0200	< 0.0200
16:0 Palmitic	1.72	1.78	1.79
16:1 Palmitoleic	< 0.0200	< 0.0200	< 0.0200
17:0 Heptadecanoic	< 0.0200	< 0.0200	< 0.0200
17:1 9c Heptadecenoic	< 0.0200	< 0.0200	< 0.0200
18:0 Stearic	1.00	0.970	0.960
18:1 9t Octadecenoic	< 0.0200	< 0.0200	< 0.0200
18:1 Oleic	4.55	4.58	4.63
18:2 6c,9c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
18:2 Linoleic	8.84	9.22	9.27
18:2 9c,15c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
20:0 Arachidic	0.0732	0.0693	0.0690
18:3 Gamma Linolenic	< 0.0200	< 0.0200	< 0.0200
20:1 Eicosenoic	0.0340	0.0334	0.0340
18:3 Linolenic	1.18	1.24	1.22
20:2 11c,14c Eicosadienoic	< 0.0200	< 0.0200	< 0.0200
22:0 Behenic	0.0596	0.0599	0.0602
20:3 11c,14c,17c Eicosatrienoic	< 0.0200	< 0.0200	< 0.0200
20:4 Arachidonic	< 0.0200	< 0.0200	< 0.0200
24:0 Lignoceric	0.0319	0.0311	0.0310

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00283	REG07170-00284	REG07170-00285
Reg. Lot Number	GLP-0707-18828-S	GLP-0707-18828-S	GLP-0707-18828-S
Material Name	Pioneer 93B82 (A)	Pioneer 93B82 (A)	Pioneer 93B82 (A)
Site Code	QUI	QUI	QUI
Plot ID	101	201	303
Covance LIMS Number	81000058	81000263	81000282
Proximate (%)			
Moisture	10.5	7.58	7.48
Protein	34.4	37.2	34.3
Total Fat	19.4	19.0	20.2
Ash	5.66	5.88	5.91
Carbohydrates	30.0	30.3	32.1
Acid Detergent Fiber (%)	13.8	14.0	15.6
Neutral Detergent Fiber (%)	18.7	16.0	12.6
Lectin (H.U./mg)*	1.31	2.37	3.23
Trypsin Inhibitor (TIU/mg)**	31.9	41.7	41.7
Vitamin E (mg/100g)	3.36	2.71	3.12
Phytic Acid (%)	1.73	1.62	1.94
Raffinose (%)	0.589	0.570	0.587
Stachyose (%)	2.82	2.54	2.92
Isoflavones (µg/g)			
Daidzein	513	646	658
Glycitein	85.5	86.1	74.5
Genistein	428	572	574
Amino Acids (mg/g)			
Aspartic Acid	40.3	40.4	39.8
Threonine	12.6	12.2	13.2
Serine	16.4	16.8	18.6
Glutamic Acid	65.6	66.4	64.2
Proline	18.0	17.7	17.2
Glycine	15.6	15.8	15.3
Alanine	15.4	15.5	15.2
Cystine	5.65	5.72	5.64
Valine	18.3	18.5	17.0
Methionine	5.18	5.29	4.92
Isoleucine	17.2	17.3	16.0
Leucine	27.1	27.4	26.9
Tyrosine	12.3	12.1	12.6
Phenylalanine	18.1	18.3	17.9
Lysine	22.7	22.7	22.6
Histidine	9.41	9.36	9.21
Arginine	27.8	27.6	26.9
Tryptophan	4.06	4.03	3.63

*H.U. - Hemagglutinating Unit

**TIU - Trypsin Inhibitor Unit

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00283	REG07170-00284	REG07170-00285
Reg. Lot Number	GLP-0707-18828-S	GLP-0707-18828-S	GLP-0707-18828-S
Material Name	Pioneer 93B82 (A)	Pioneer 93B82 (A)	Pioneer 93B82 (A)
Site Code	QUI	QUI	QUI
Plot ID	101	201	303
Covance LIMS Number	81000058	81000263	81000282
Fatty Acids (%)			
8:0 Caprylic	< 0.0200	< 0.0200	< 0.0200
10:0 Capric	< 0.0200	< 0.0200	< 0.0200
12:0 Lauric	< 0.0200	< 0.0200	< 0.0200
14:0 Myristic	< 0.0200	< 0.0200	< 0.0200
14:1 Myristoleic	< 0.0200	< 0.0200	< 0.0200
15:0 Pentadecylic	< 0.0200	< 0.0200	< 0.0200
15:1 10c Pentadecenoic	< 0.0200	< 0.0200	< 0.0200
16:0 Palmitic	1.69	1.67	1.84
16:1 Palmitoleic	< 0.0200	< 0.0200	< 0.0200
17:0 Heptadecanoic	< 0.0200	< 0.0200	< 0.0200
17:1 9c Heptadecenoic	< 0.0200	< 0.0200	< 0.0200
18:0 Stearic	1.06	0.963	0.954
18:1 9t Octadecenoic	< 0.0200	< 0.0200	< 0.0200
18:1 Oleic	5.04	4.77	5.24
18:2 6c,9c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
18:2 Linoleic	9.41	9.27	10.2
18:2 9c,15c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
20:0 Arachidic	0.0800	0.0700	0.0729
18:3 Gamma Linolenic	< 0.0200	< 0.0200	< 0.0200
20:1 Eicosenoic	0.0396	0.0347	0.0419
18:3 Linolenic	1.12	1.11	1.20
20:2 11c,14c Eicosadienoic	< 0.0200	< 0.0200	< 0.0200
22:0 Behenic	0.0663	0.0613	0.0626
20:3 11c,14c,17c Eicosatrienoic	< 0.0200	< 0.0200	< 0.0200
20:4 Arachidonic	< 0.0200	< 0.0200	< 0.0200
24:0 Lignoceric	0.0287	0.0276	0.0286

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00274	REG07170-00275	REG07170-00276
Reg. Lot Number	GLP-0707-18834-S	GLP-0707-18834-S	GLP-0707-18834-S
Material Name	Stine 3600-0 (A)	Stine 3600-0 (A)	Stine 3600-0 (A)
Site Code	QUI	QUI	QUI
Plot ID	105	203	301
Covance LIMS Number	81000026	81000269	81000272
Proximate (%)			
Moisture	11.2	7.09	7.93
Protein	32.0	31.2	31.3
Total Fat	19.8	20.4	18.7
Ash	5.40	5.97	5.51
Carbohydrates	31.6	35.3	36.6
Acid Detergent Fiber (%)	14.9	14.6	14.4
Neutral Detergent Fiber (%)	14.7	17.2	18.4
Lectin (H.U./mg)*	2.47	1.45	1.30
Trypsin Inhibitor (TIU/mg)**	26.1	29.8	22.7
Vitamin E (mg/100g)	4.39	4.11	4.60
Phytic Acid (%)	1.72	1.94	1.65
Raffinose (%)	0.608	0.503	0.633
Stachyose (%)	3.52	2.72	2.93
Isoflavones (µg/g)			
Daidzein	817	1070	1050
Glycitein	58.5	86.4	174
Genistein	1020	1520	1110
Amino Acids (mg/g)			
Aspartic Acid	38.3	34.8	40.3
Threonine	12.2	11.6	11.8
Serine	16.8	15.2	15.7
Glutamic Acid	60.2	54.5	63.5
Proline	16.4	15.1	16.8
Glycine	14.3	13.5	15.2
Alanine	14.6	13.7	15.3
Cystine	5.15	5.41	5.29
Valine	16.8	15.6	18.0
Methionine	4.71	4.83	5.16
Isoleucine	15.8	14.7	16.9
Leucine	25.5	23.7	26.6
Tyrosine	11.5	10.7	11.5
Phenylalanine	17.1	15.6	17.1
Lysine	21.4	20.1	22.1
Histidine	8.76	8.09	9.13
Arginine	25.2	22.5	26.7
Tryptophan	3.66	3.65	3.84

*H.U. - Hemagglutinating Unit

**TIU - Trypsin Inhibitor Unit

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00274	REG07170-00275	REG07170-00276
Reg. Lot Number	GLP-0707-18834-S	GLP-0707-18834-S	GLP-0707-18834-S
Material Name	Stine 3600-0 (A)	Stine 3600-0 (A)	Stine 3600-0 (A)
Site Code	QUI	QUI	QUI
Plot ID	105	203	301
Covance LIMS Number	81000026	81000269	81000272
Fatty Acids (%)			
8:0 Caprylic	< 0.0200	< 0.0200	< 0.0200
10:0 Capric	< 0.0200	< 0.0200	< 0.0200
12:0 Lauric	< 0.0200	< 0.0200	< 0.0200
14:0 Myristic	< 0.0200	< 0.0200	< 0.0200
14:1 Myristoleic	< 0.0200	< 0.0200	< 0.0200
15:0 Pentadecylic	< 0.0200	< 0.0200	< 0.0200
15:1 10c Pentadecenoic	< 0.0200	< 0.0200	< 0.0200
16:0 Palmitic	1.90	2.04	1.81
16:1 Palmitoleic	< 0.0200	< 0.0200	< 0.0200
17:0 Heptadecanoic	< 0.0200	< 0.0200	< 0.0200
17:1 9c Heptadecenoic	< 0.0200	< 0.0200	< 0.0200
18:0 Stearic	1.04	0.903	1.02
18:1 9t Octadecenoic	< 0.0200	< 0.0200	< 0.0200
18:1 Oleic	4.96	5.03	4.70
18:2 6c,9c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
18:2 Linoleic	9.47	10.2	9.21
18:2 9c,15c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
20:0 Arachidic	0.0762	0.0661	0.0731
18:3 Gamma Linolenic	< 0.0200	< 0.0200	< 0.0200
20:1 Eicosenoic	0.0385	0.0397	0.0354
18:3 Linolenic	1.16	1.29	1.06
20:2 11c,14c Eicosadienoic	< 0.0200	< 0.0200	< 0.0200
22:0 Behenic	0.0630	0.0613	0.0586
20:3 11c,14c,17c Eicosatrienoic	< 0.0200	< 0.0200	< 0.0200
20:4 Arachidonic	< 0.0200	< 0.0200	< 0.0200
24:0 Lignoceric	0.0291	0.0300	0.0281

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00352	REG07170-00353	REG07170-00354
Reg. Lot Number	GLP-0707-18809-S	GLP-0707-18809-S	GLP-0707-18809-S
Material Name	Asgrow A4324	Asgrow A4324	Asgrow A4324
Site Code	RAN	RAN	RAN
Plot ID	101	204	302
Covance LIMS Number	81000053	81000278	81000266
Proximate (%)			
Moisture	12.5	11.3	11.3
Protein	32.3	30.5	32.4
Total Fat	15.6	16.2	15.0
Ash	5.10	5.00	5.14
Carbohydrates	34.5	37.0	36.2
Acid Detergent Fiber (%)	10.9	16.0	12.5
Neutral Detergent Fiber (%)	12.2	12.0	13.5
Lectin (H.U./mg)*	1.54	4.12	2.72
Trypsin Inhibitor (TIU/mg)**	22.8	20.5	25.1
Vitamin E (mg/100g)	1.96	2.08	1.33
Phytic Acid (%)	1.39	1.39	1.65
Raffinose (%)	0.492	0.534	0.555
Stachyose (%)	2.84	2.81	2.66
Isoflavones (µg/g)			
Daidzein	1320	1420	1750
Glycitein	83.3	91.6	94.7
Genistein	948	1060	1210
Amino Acids (mg/g)			
Aspartic Acid	37.9	36.8	36.4
Threonine	12.0	12.3	11.5
Serine	15.8	17.3	15.8
Glutamic Acid	61.1	59.5	59.1
Proline	16.7	15.8	15.8
Glycine	14.7	14.3	14.3
Alanine	14.5	14.2	14.2
Cystine	5.01	4.92	4.80
Valine	17.2	15.8	16.6
Methionine	4.92	4.75	4.67
Isoleucine	16.0	14.8	15.3
Leucine	25.6	25.2	24.9
Tyrosine	11.5	11.5	10.2
Phenylalanine	17.1	16.8	16.5
Lysine	21.5	21.2	21.0
Histidine	8.96	8.71	8.72
Arginine	26.9	25.6	25.1
Tryptophan	3.73	3.51	3.83

*H.U. - Hemagglutinating Unit

**TIU - Trypsin Inhibitor Unit

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00352	REG07170-00353	REG07170-00354
Reg. Lot Number	GLP-0707-18809-S	GLP-0707-18809-S	GLP-0707-18809-S
Material Name	Asgrow A4324	Asgrow A4324	Asgrow A4324
Site Code	RAN	RAN	RAN
Plot ID	101	204	302
Covance LIMS Number	81000053	81000278	81000266
Fatty Acids (%)			
8:0 Caprylic	< 0.0200	< 0.0200	< 0.0200
10:0 Capric	< 0.0200	< 0.0200	< 0.0200
12:0 Lauric	< 0.0200	< 0.0200	< 0.0200
14:0 Myristic	< 0.0200	< 0.0200	< 0.0200
14:1 Myristoleic	< 0.0200	< 0.0200	< 0.0200
15:0 Pentadecylic	< 0.0200	< 0.0200	< 0.0200
15:1 10c Pentadecenoic	< 0.0200	< 0.0200	< 0.0200
16:0 Palmitic	1.46	1.61	1.50
16:1 Palmitoleic	< 0.0200	< 0.0200	< 0.0200
17:0 Heptadecanoic	< 0.0200	< 0.0200	< 0.0200
17:1 9c Heptadecenoic	< 0.0200	< 0.0200	< 0.0200
18:0 Stearic	0.722	0.837	0.640
18:1 9t Octadecenoic	< 0.0200	< 0.0200	< 0.0200
18:1 Oleic	3.16	3.59	3.07
18:2 6c,9c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
18:2 Linoleic	7.56	8.18	7.82
18:2 9c,15c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
20:0 Arachidic	0.0555	0.0638	0.0489
18:3 Gamma Linolenic	< 0.0200	< 0.0200	< 0.0200
20:1 Eicosenoic	0.0235	0.0262	0.0223
18:3 Linolenic	1.16	1.23	1.32
20:2 11c,14c Eicosadienoic	< 0.0200	< 0.0200	< 0.0200
22:0 Behenic	0.0571	0.0623	0.0556
20:3 11c,14c,17c Eicosatrienoic	< 0.0200	< 0.0200	< 0.0200
20:4 Arachidonic	< 0.0200	< 0.0200	< 0.0200
24:0 Lignoceric	< 0.0200	0.0214	< 0.0200

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00346	REG07170-00347	REG07170-00348
Reg. Lot Number	GLP-0707-18826-S	GLP-0707-18826-S	GLP-0707-18826-S
Material Name	Lewis 391 (A)	Lewis 391 (A)	Lewis 391 (A)
Site Code	RAN	RAN	RAN
Plot ID	106	201	301
Covance LIMS Number	81000038	81000273	81000288
Proximate (%)			
Moisture	12.2	9.41	8.60
Protein	33.7	30.9	35.9
Total Fat	16.6	16.3	16.3
Ash	5.28	5.12	5.36
Carbohydrates	32.2	38.3	33.8
Acid Detergent Fiber (%)	14.6	12.8	15.1
Neutral Detergent Fiber (%)	14.5	15.9	11.2
Lectin (H.U./mg)*	0.567	1.12	1.30
Trypsin Inhibitor (TIU/mg)**	26.5	22.1	22.6
Vitamin E (mg/100g)	1.99	2.01	1.72
Phytic Acid (%)	1.49	1.51	1.65
Raffinose (%)	0.560	0.426	0.495
Stachyose (%)	3.31	2.70	2.73
Isoflavones (µg/g)			
Daidzein	870	1050	1040
Glycitein	169	259	212
Genistein	889	1090	1110
Amino Acids (mg/g)			
Aspartic Acid	38.7	39.5	41.1
Threonine	12.5	12.2	13.5
Serine	17.2	15.9	18.3
Glutamic Acid	63.0	64.7	67.1
Proline	17.4	17.3	17.5
Glycine	15.0	15.4	15.7
Alanine	14.9	15.3	15.6
Cystine	5.22	5.20	5.28
Valine	17.2	18.2	18.2
Methionine	4.73	5.04	4.94
Isoleucine	16.1	17.0	17.0
Leucine	26.3	26.8	27.9
Tyrosine	11.8	11.8	12.6
Phenylalanine	17.7	18.1	18.9
Lysine	22.2	22.5	23.4
Histidine	9.01	9.19	9.55
Arginine	27.4	27.5	29.1
Tryptophan	3.74	4.13	3.69

*H.U. - Hemagglutinating Unit

**TIU - Trypsin Inhibitor Unit

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00346	REG07170-00347	REG07170-00348
Reg. Lot Number	GLP-0707-18826-S	GLP-0707-18826-S	GLP-0707-18826-S
Material Name	Lewis 391 (A)	Lewis 391 (A)	Lewis 391 (A)
Site Code	RAN	RAN	RAN
Plot ID	106	201	301
Covance LIMS Number	81000038	81000273	81000288
Fatty Acids (%)			
8:0 Caprylic	< 0.0200	< 0.0200	< 0.0200
10:0 Capric	< 0.0200	< 0.0200	< 0.0200
12:0 Lauric	< 0.0200	< 0.0200	< 0.0200
14:0 Myristic	< 0.0200	< 0.0200	< 0.0200
14:1 Myristoleic	< 0.0200	< 0.0200	< 0.0200
15:0 Pentadecylic	< 0.0200	< 0.0200	< 0.0200
15:1 10c Pentadecenoic	< 0.0200	< 0.0200	< 0.0200
16:0 Palmitic	1.35	1.49	1.40
16:1 Palmitoleic	< 0.0200	< 0.0200	< 0.0200
17:0 Heptadecanoic	< 0.0200	< 0.0200	< 0.0200
17:1 9c Heptadecenoic	< 0.0200	< 0.0200	< 0.0200
18:0 Stearic	0.764	0.831	0.739
18:1 9t Octadecenoic	< 0.0200	< 0.0200	< 0.0200
18:1 Oleic	3.65	3.94	3.66
18:2 6c,9c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
18:2 Linoleic	8.29	8.26	8.56
18:2 9c,15c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
20:0 Arachidic	0.0565	0.0603	0.0553
18:3 Gamma Linolenic	< 0.0200	< 0.0200	< 0.0200
20:1 Eicosenoic	0.0259	0.0291	0.0257
18:3 Linolenic	1.17	1.03	1.24
20:2 11c,14c Eicosadienoic	< 0.0200	< 0.0200	< 0.0200
22:0 Behenic	0.0559	0.0539	0.0552
20:3 11c,14c,17c Eicosatrienoic	< 0.0200	< 0.0200	< 0.0200
20:4 Arachidonic	< 0.0200	< 0.0200	< 0.0200
24:0 Lignoceric	0.0201	0.0225	< 0.0200

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00349	REG07170-00350	REG07170-00351
Reg. Lot Number	GLP-0707-18835-S	GLP-0707-18835-S	GLP-0707-18835-S
Material Name	Stine 3870-0 (A)	Stine 3870-0 (A)	Stine 3870-0 (A)
Site Code	RAN	RAN	RAN
Plot ID	103	206	305
Covance LIMS Number	81000023	81000277	81000276
Proximate (%)			
Moisture	12.0	9.29	8.53
Protein	31.4	30.9	29.3
Total Fat	18.1	17.2	18.2
Ash	5.19	5.27	5.48
Carbohydrates	33.3	37.3	38.5
Acid Detergent Fiber (%)	12.5	18.2	13.4
Neutral Detergent Fiber (%)	13.3	17.9	17.4
Lectin (H.U./mg)*	2.94	1.71	1.30
Trypsin Inhibitor (TIU/mg)**	22.5	23.3	21.9
Vitamin E (mg/100g)	1.05	0.986	1.13
Phytic Acid (%)	1.38	1.57	1.63
Raffinose (%)	0.441	0.389	0.403
Stachyose (%)	3.99	2.55	2.77
Isoflavones (µg/g)			
Daidzein	1370	1820	1750
Glycitein	68.4	47.2	118
Genistein	1370	1810	1690
Amino Acids (mg/g)			
Aspartic Acid	36.6	35.1	34.9
Threonine	12.1	11.8	10.9
Serine	16.2	16.7	14.7
Glutamic Acid	58.2	55.8	55.4
Proline	16.2	15.3	15.1
Glycine	13.8	13.5	13.8
Alanine	14.0	13.6	13.8
Cystine	4.80	4.82	4.83
Valine	16.3	15.1	16.1
Methionine	4.68	4.53	4.68
Isoleucine	15.2	14.0	14.9
Leucine	24.8	24.1	23.7
Tyrosine	11.3	10.9	10.5
Phenylalanine	16.6	16.0	15.8
Lysine	20.8	20.3	20.2
Histidine	8.60	8.30	8.32
Arginine	24.7	23.6	23.2
Tryptophan	3.58	3.13	3.52

*H.U. - Hemagglutinating Unit

**TIU - Trypsin Inhibitor Unit

Table 2
Compositional Analyses of Soybean Seed

Sample No.	REG07170-00349	REG07170-00350	REG07170-00351
Reg. Lot Number	GLP-0707-18835-S	GLP-0707-18835-S	GLP-0707-18835-S
Material Name	Stine 3870-0 (A)	Stine 3870-0 (A)	Stine 3870-0 (A)
Site Code	RAN	RAN	RAN
Plot ID	103	206	305
Covance LIMS Number	81000023	81000277	81000276
Fatty Acids (%)			
8:0 Caprylic	< 0.0200	< 0.0200	< 0.0200
10:0 Capric	< 0.0200	< 0.0200	< 0.0200
12:0 Lauric	< 0.0200	< 0.0200	< 0.0200
14:0 Myristic	< 0.0200	< 0.0200	< 0.0200
14:1 Myristoleic	< 0.0200	< 0.0200	< 0.0200
15:0 Pentadecylic	< 0.0200	< 0.0200	< 0.0200
15:1 10c Pentadecenoic	< 0.0200	< 0.0200	< 0.0200
16:0 Palmitic	1.92	1.86	1.97
16:1 Palmitoleic	< 0.0200	< 0.0200	< 0.0200
17:0 Heptadecanoic	0.0210	0.0209	0.0219
17:1 9c Heptadecenoic	< 0.0200	< 0.0200	< 0.0200
18:0 Stearic	0.908	0.774	0.833
18:1 9t Octadecenoic	< 0.0200	< 0.0200	< 0.0200
18:1 Oleic	3.69	3.44	3.70
18:2 6c,9c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
18:2 Linoleic	9.02	8.94	9.39
18:2 9c,15c Octadecadienoic	< 0.0200	< 0.0200	< 0.0200
20:0 Arachidic	0.0633	0.0555	0.0584
18:3 Gamma Linolenic	< 0.0200	< 0.0200	< 0.0200
20:1 Eicosenoic	0.0255	0.0250	0.0260
18:3 Linolenic	1.34	1.41	1.47
20:2 11c,14c Eicosadienoic	< 0.0200	< 0.0200	< 0.0200
22:0 Behenic	0.0513	0.0475	0.0519
20:3 11c,14c,17c Eicosatrienoic	< 0.0200	< 0.0200	< 0.0200
20:4 Arachidonic	< 0.0200	< 0.0200	< 0.0200
24:0 Lignoceric	< 0.0200	< 0.0200	< 0.0200

APPENDIX A
Analytical Method Summaries and Reference Standards

Analytical Method Summaries and Reference Standards

Acid Detergent Fiber (ADF)

The sample was placed in a fritted vessel and washed with an acidic boiling detergent solution that dissolved the protein, carbohydrate, and ash. An acetone wash removed the fats and pigments. The lignocellulose fraction was collected on the frit and determined gravimetrically. The limit of quantitation for this study was 0.100%.

Reference:

Forage and Fiber Analyses, Agriculture Handbook No.379, United States Department of Agriculture, Washington, D.C. (1970).

Amino Acid Composition (TAA5)

The sample was assayed by three methods to obtain the full profile. Tryptophan required a base hydrolysis with sodium hydroxide. The sulfur-containing amino acids required an oxidation with performic acid prior to hydrolysis with hydrochloric acid. Analysis of the samples for the remaining amino acids was accomplished through direct acid hydrolysis with hydrochloric acid. Once hydrolyzed, the individual amino acids were then quantitated using an automated amino acid analyzer. The limit of quantitation for this study was 0.100 mg/g.

Reference Standards:

ThermoScientific K18, 2.5 $\mu\text{mol/mL}$ per constituent except cystine (1.25 $\mu\text{mol/mL}$),
Lot Number JC120602

Sigma, L-Tryptophan, 100%, Lot Number 076K0075

Sigma/BioChemika, L-Cysteic Acid Monohydrate, >99% (used as 100%),
Lot Number 1305674

Sigma, L-Methionine Sulfone, >99% (used as 100%), Lot Number 012H3349

Reference:

Official Methods of Analysis of AOAC INTERNATIONAL, 18th Ed., Method 982.30,
AOAC INTERNATIONAL: Gaithersburg, Maryland, (2005).

Ash (ASHM)

The sample was placed in an electric furnace at 550°C and ignited to drive off all volatile organic matter. The nonvolatile matter remaining was quantitated gravimetrically and calculated to determine percent ash. The limit of quantitation for this study was 0.100%.

Reference:

Official Methods of Analysis of AOAC INTERNATIONAL, 18th Ed., Method 923.03,
AOAC INTERNATIONAL: Gaithersburg, Maryland, (2005).

Carbohydrates (CHO)

The total carbohydrate level was calculated by difference using the fresh weight-derived data and the following equation:

$$\% \text{ carbohydrates} = 100 \% - (\% \text{ protein} + \% \text{ fat} + \% \text{ moisture} + \% \text{ ash})$$

The limit of quantitation for this study was 0.100%.

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 at an elevated temperature. The fat was extracted with ether and hexane. The extract was evaporated on a steambath, re-dissolved in hexane and filtered through a sodium sulfate column. The hexane extract was then evaporated again on a steambath under nitrogen, dried, and weighed. The limit of quantitation for this study was 0.100%.

Reference:

Official Methods of Analysis of AOAC INTERNATIONAL, 18th Ed., Methods 922.06 and 954.02, AOAC INTERNATIONAL, Gaithersburg, Maryland, (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 limit of quantitation for this study was 0.100%.

Reference:

Official Methods of Analysis of AOAC INTERNATIONAL, 18th Ed., Method 960.39, AOAC INTERNATIONAL: Gaithersburg, Maryland, (2005).

Fatty Acid Profile with Trans Fat by GC (FALT)

The lipid was extracted, saponified with 0.5N methanolic sodium hydroxide, and methylated with 14% BF₃-methanol. The resulting methyl esters of the fatty acids were extracted with heptane. An internal standard was added prior to the lipid extraction. The methyl esters of the fatty acids were analyzed by gas chromatography using external standards for quantitation. The limit of quantitation was 0.0200%.

Reference Standards:

Nu Chek Prep GLC Reference Standard Hazelton No. 1*, Lot Number AU18-S

Nu Chek Prep GLC Reference Standard Hazelton No. 2*, Lot Number M13-O

Nu Chek Prep GLC Reference Standard Hazelton No. 3*, Lot Number MA18-S

Nu Chek Prep GLC Reference Standard Hazelton No. 4*, Lot Number AU18-S

*Overall purity of the sum of the mixture of components is 100%.

Nu Chek Prep Methyl Gamma Linolenate, used as 100%,

Lot Number U-63M-JY12-R

Nu Chek Prep Methyl Tridecanoate, used as 100%, Lot Number N-13M-A2-S

Nu Chek Prep Methyl Butyrate, used as 100%, Lot Number N-4M-J20-R

Nu Chek Prep Methyl Hexanoate, used as 100%, Lot Number N-6M-A25-R

Nu Chek Prep Methyl Erucate, used as 100%, Lot Number U-79M-AU3-Q

Nu Chek Prep Methyl Lignocerate, used as 100%, Lot Number N-24M-AU18-S

Nu Chek Prep Methyl Docosapentaenoate, used as 100%,

Lot Number U-101M-JY14-S

Nu Chek Prep Methyl Docosaheptaenoate, used as 100%, Lot Number U-84M-M30-S

Nu Chek Prep Methyl Eicosapentaenoate, used as 100%, Lot Number U-99M-D14-R

Cayman Chemicals Stearidonic Acid Methyl Ester, used as 100%,

Lot Number 182102-1

Nu Chek Prep Methyl Elaidate, used as 100%, Lot Number U-47M-JA18-R

Nu Chek Prep Methyl Linoelaidate, used as 100%, Lot Number U-60M-F27-R

Nu Chek Prep Methyl Nervonate, used as 100%, Lot Number U-88M-AU4-S

Nu Chek Prep Methyl Palmitelaidate, used as as 100%, Lot Number U-41M-M21-S

Monsanto Mono Trans SDA, used as 99%, Lot Number GLP-0804-19309-A

Monsanto Mono Trans Alpha Linolenic Acid, used as 100%,

Lot Number GLP-0804-19308-A

Monsanto 9c, 15c Octadecadienoate (Omnisoy), used as 100%,

Lot Number GLP-0802-19168-A

Larodan Methyl 6(z), 9(z)-Octadecadienoate, used as 99.3%, Lot Number LX-017

Monsanto Omnisoy C17:1 Methyl 9-cis-Heptadecenoate, used as 99%,

Lot Number GLP-0806-19436-A

References:

Official Methods of Analysis of AOAC INTERNATIONAL, 18th Ed., Method 996.06, AOAC INTERNATIONAL, Gaithersburg, MD (2005).

Official Methods and Recommended Practices of the AOCS, Fifth Ed., American Oil Chemists' Society, Champaign, IL (1997), American Oil Chemists' Society, Ce-1h-05.

Official Methods of Analysis of AOAC INTERNATIONAL, 18th Ed., Method 983.23, AOAC INTERNATIONAL, Gaithersburg, MD, (2005).

Isoflavones Analysis (ISOF)

The sample was extracted using a solution of hydrochloric acid and reagent alcohol heated on steam baths or 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 limit of quantitation for each component was 10.0 ppm (µg/g) for each component.

Reference Standards:

Chromadex, Daidzein, 96.5%, Lot Number 04007-120

Chromadex, Glycitein, 96.3%, Lot Number 07344-571

Indofine, Genistein, ≥99%¹, Lot Number 0309074

¹Used as 100% in calculations

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).

Lectin (LECT)

The sample was suspended in phosphate buffered saline (PBS), shaken, and filtered. An aliquot of the resulting extract was serially diluted in 10 cuvettes containing PBS. A 10% hematocrit of lyophilized rabbit blood in PBS was added to each dilution. After 2.5 hours, the absorbance of each dilution of the sample and lectin control was measured on a spectrophotometer at 620 nm, using PBS to zero the instrument. One hemagglutinating unit (H.U.) was defined as the level that caused 50% of the standard cell suspension to sediment in 2.5 hours. The limit of quantitation for this study was 0.10 H.U./mg.

Reference Standard:

Sigma-Aldrich, Red Blood Cells, Rabbit, Product #R1629, Lot Number 105K6042

References:

Klurfeld, D. M. and Kritchevsky, D., "Isolation and Quantitation of Lectins from Vegetable Oils," *Lipids*, 22:667-668, (1987).

Klurfeld, D. M., Personal communication.

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).

Moisture (M100)

The sample was dried in a vacuum oven at approximately 100°C to a constant weight. The moisture weight loss was determined and converted to percent moisture. The limit of quantitation for this study was 0.100%.

Reference:

Official Methods of Analysis of AOAC INTERNATIONAL, 18th Ed., Methods 926.08 and 925.09, AOAC INTERNATIONAL: Gaithersburg, Maryland, (2005).

Neutral Detergent Fiber, Enzyme Method (NDFE)

The sample was placed in a fritted vessel and washed with a neutral boiling detergent solution that dissolved the protein, carbohydrate, enzyme, and ash. An acetone wash removed the fats and pigments. Hemicellulose, cellulose, and lignin fractions were collected on the frit and determined gravimetrically. The limit of quantitation for this study was 0.100%.

References:

Approved Methods of the American Association of Cereal Chemists, 9th Ed., Method 32.20, (1998).

Forage Fiber Analyses, Agriculture Handbook No. 379, United States Department of Agriculture, (1970).

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 limit of quantitation for this study was 0.100%.

Reference Standard:

Aldrich, Phytic Acid, Dodecasodium Salt Hydrate, 95%, Lot Number 077K0693

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)

Nitrogenous compounds in the sample were reduced in the presence of boiling sulfuric acid and a mercury catalyst mixture to form ammonia. 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 limit of quantitation for this study was 0.100%.

References:

Official Methods of Analysis of AOAC INTERNATIONAL, 18th Ed., Methods 955.04 and 979.09, AOAC INTERNATIONAL, Gaithersburg, Maryland, (2005).

Bradstreet, R. B., *The Kjeldahl Method for Organic Nitrogen*, Academic Press: New York, New York, (1965).

Kalhoff, I. M., and Sandell, E. B., *Quantitative Inorganic Analysis*, MacMillan: New York, (1948).

Raffinose and Stachyose (SUGT)

The sample was extracted with deionized water and the extract treated with a hydroxylamine hydrochloride solution in pyridine, containing phenyl- β -D-glucoside as an internal standard. The resulting oximes were converted to silyl derivatives by treatment with hexamethyldisilazane and trifluoroacetic acid and analyzed by gas chromatography using a flame ionization detector. The quantitation limit for this study was 0.0500%.

Reference Standards:

Sigma, Raffinose Pentahydrate, 99% (84.0% after correction for degree of hydration), Lot Number 037K1059

Sigma, Stachyose, 98% (96.8% after correction for degree of hydration), Lot Number 038K3775

References:

Brobst, K. M., "Gas-Liquid Chromatography of Trimethylsilyl Derivatives," *Methods in Carbohydrate Chemistry*, Volume 6, Academic Press: New York, New York, (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).

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

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Monsanto REG-08-265

exposed to a known amount of trypsin and benzoyl-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 limit of quantitation for this study was 1.00 Trypsin Inhibitor Units (TIU)/mg.

Reference:

Official Methods and Recommended Practices of the American Oil Chemists' Society, 5th Ed., Method Ba 12-75, American Oil Chemists' Society: Champaign, Illinois, (1997).

Vitamin E (LCAT)

The sample was saponified to break down any fat and release vitamin E. The saponified mixture was extracted with ethyl ether and then quantitated by high-performance liquid chromatography using a silica column. The limit of quantitation for this study was 0.500 mg/100g.

Reference Standard:

USP, Alpha Tocopherol, 100%, Lot Number M

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 alpha-Tocopherol in Animal Feedstuffs," *Journal of the Association of Official Analytical Chemists*, 63(6):1258-1261, (1980).

APPENDIX B
Fatty Acid Nomenclature

Fatty Acid Nomenclature

Carbo n #	Trivial	Systematic	Double bond location(s)
8:0	Caprylic	Octanoic acid	-
10:0	Capric	Decanoic acid	-
12:0	Lauric	Dodecanoic acid	-
14:0	Myristic	Tetradecanoic acid	-
14:1	Myristoleic	Tetradecenoic acid	9c
15:0	Pentadecylic	Pentadecanoic acid	-
15:1	-	Pentadecenoic acid	10c
16:0	Palmitic	Hexadecanoic acid	-
16:1	Palmitoleic	Hexadecenoic acid	9c
17:0	Margaric	Heptadecanoic acid	-
17:1	Heptadecylenic	Heptadecenoic acid	9c
18:0	Stearic	Octadecanoic acid	-
18:1	Elaidic	Octadecenoic acid	9t
18:1	Oleic	Octadecenoic acid	9c
18:2	Linoleic	Octadecadienoic acid	9c,12c
18:2	-	Octadecadienoic acid	6c,9c
18:2	-	Octadecadienoic acid	9c,15c
18:3	Linolenic	Octadecatrienoic acid	9c,12c,15c
18:3	Gamma Linolenic	Octadecatrienoic acid	6c,9c,12c
20:0	Arachidic	Eicosanoic acid	-
20:1	Gondoic	Eicosenoic acid	11c
20:2	-	Eicosadienoic acid	11c,14c
20:3	-	Eicosatrienoic acid	11c,14c,17c
20:4	Arachidonic	Eicosatetraenoic acid	5c,8c,11c,14c
22:0	Behenic	Docosanoic acid	-
24:0	Lignoceric	Tetracosanoic acid	-

Appendix 2. Certus Statistical Sub-Report

Composition Analyses of Forage and Seed Collected from MON 87705 Produced in Chile during the 2007-2008 Growing Season

The following 80 pages are the statistical sub-report
Pages 144 — 223

STATISTICAL REPORT


Composition Analyses of Forage and Seed Collected from MON 87705 Produced in Chile during the 2007-2008 Growing Season

STUDY NUMBER: REG-08-265


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1. Data Description

A SAS[®] dataset (FINALDATA759.sas7bdat, created 12/19/2008) containing soybean forage and seed compositional analysis data was received from Monsanto. Data were from test substance MON 87705, conventional control substance Asgrow A3525, and nineteen commercial conventional reference substances.

Soybean forage and seed of the test, control, and reference substances were collected from replicated plots at five Chilean sites during the 2007-2008 growing season. Test and control substances were planted in a randomized complete block design. Samples were unavailable for one replicate of Asgrow A3525 at Site QUI. Reference substances were distributed as follows across sites:

Site CdT	Site MEL	Site QUI	Site RAN	Site SFR
NK32Z3, Stine 3300-0, Channel Bio 3461, Stewart 3454	Croplan 3596STS, Garst 3585N, Pioneer 93B52, Quality Plus 365C	Stine 3600-0, Channel Bio 37002, Lewis 372, Pioneer 93B82	Lewis 391, Stine 3870-0, Asgrow A4324	Asgrow A2869, Stine 2788, Asgrow A3244, Hoegemeyer 333

Components with greater than fifty percent of observations below the assay's limit of quantitation (LOQ) were excluded from analysis. Excluded components are presented in Listing 1. Otherwise, results below the LOQ were assigned a value equal to half the LOQ. The following component was assigned a value:

		Obs. Below LOQ				
Component	Units	N	(%)	Total N	LOQ	Value Assigned
Seed Fatty Acid						
24:0 Lignoceric	% FW	13	15.1	86	0.020	0.010

Individual samples assigned a value are presented in Listing 2.

[®] SAS is a registered trademark of SAS Institute Inc.

The following formulas were used for re-expression of soybean composition data for statistical analysis:

Component	From (X)	To	Formula ¹
Proximates (excluding Moisture), Fiber, Phytic Acid, Raffinose, Stachyose	% FW	% DW	X/d
Isoflavones	µg/g FW	µg/g DW	X/d
Lectin	H.U./mg FW	H.U./mg DW	X/d
Trypsin Inhibitor	TIU/mg FW	TIU/mg DW	X/d
Vitamin E	mg/100g FW	mg/100g DW	X/d
Amino Acids (AA)	mg/g FW	% DW	X/(10d)
Fatty Acids (FA)	% FW	% Total FA	(100)X _j /ΣX, for each FA _j where ΣX is over all the FA
¹ 'X' is the individual sample value; 'd' is the fraction of the sample that is dry matter.			

2. Statistical Methods

The SAS¹ GLM procedure was applied to all data (test, control and reference) to detect potential outliers in the dataset by screening studentized PRESS residuals. Substance, site and replication effects were included in the model.

A PRESS residual² is the difference between any value and its predicted value from a statistical model that excludes the data point. The studentized version scales these residuals so that the values tend to have a standard normal distribution when outliers are absent. Thus, most values are expected to be between ± 3 . Extreme data points that are also outside of the ± 6 studentized PRESS residual range are considered for exclusion, as outliers, from the final analyses. No results had PRESS residual values outside of the ± 6 range, for this study.

All soybean compositional components were statistically analyzed using a mixed model analysis of variance. The five replicated sites were analyzed both separately and combined. Individual replicated site analyses used model (1).

$$(1) Y_{ij} = U + T_i + B_j + e_{ij},$$

where Y_{ij} = unique individual observation, U = overall mean, T_i = substance effect, B_j = random block effect, and e_{ij} = residual error.

Combined site analyses used model (2).

$$(2) Y_{ijk} = U + T_i + L_j + B(L)_{jk} + LT_{ij} + e_{ijk},$$

where Y_{ijk} = unique individual observation, U = overall mean, T_i = substance effect, L_j = random location effect, $B(L)_{jk}$ = random block within location effect, LT_{ij} = random location by substance interaction effect, and e_{ijk} = residual error.

A tolerance interval is an interval that one can claim, with a specified degree of confidence, contains at least a specified proportion, p , of an entire sampled population for the parameter measured.

For each compositional component, 99% tolerance intervals were calculated that are expected to contain, with 95% confidence, 99% of the quantities expressed in the population of commercial conventional substances. Each tolerance interval estimate was based upon one observation per unique reference substance. Because negative quantities are not possible, negative calculated lower tolerance bounds were set to zero.

3. Statistical Results

SAS software was used to generate all summary statistics and perform all analyses. Report tables present p-values from SAS as either <0.001 or the actual value truncated to three decimal places.

Statistical results are summarized for MON 87705 vs. the control (Asgrow A3525) in Tables 1 through 12. For each component, least-square means, standard errors (S.E.), and the range of observed values are presented for each substance. Mean differences, standard errors of the differences, the range of observed differences, 95% confidence intervals for the mean differences and the significance probability are presented for each comparison. In addition, the range of the observed reference values and 99% tolerance intervals are presented.

Components with a statistically significant comparison ($p < 0.05$) for MON 87705 vs. the control are further summarized in Table 13.

Numbers of significant comparisons ($p < 0.05$) observed are summarized below.

		No. of Significant Comparisons
Site	Comparisons Tested	MON 87705 vs. Control (Asgrow A3525)
CdT	50	12
MEL	50	9
QUI	50	7
RAN	50	8
SFR	50	17
Combined	50	11

4. References

1. SAS Software Release 9.2 (TS1M0). Copyright (c) 2002-2008 by SAS Institute Inc., Cary, NC, USA.
2. Belsley, D. A., Kuh, E., Welsch, R. E. 1980. Regression Diagnostics: Identifying Influential Data and Sources of Collinearity. John Wiley & Sons, New York.

Table 1. Statistical Summary of Site CdT Soybean Forage Fiber and Proximate Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525)

Component (Units) ¹	Difference (Test minus Control)				
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value
					Commercial (Range) [99% Tolerance Interval ²]
Fiber and Proximate					
Acid Detergent Fiber (% DW)	32.08 (3.03) [30.53 - 34.11]	27.25 (3.03) [19.21 - 33.03]	4.83 (3.78) [1.02 - 12.39]	-11.44, 21.09	0.329
Ash (% DW)	8.74 (0.36) [8.40 - 9.19]	8.53 (0.36) [7.76 - 9.32]	0.22 (0.51) [-0.68 - 1.43]	-1.97, 2.40	0.710
Carbohydrates (% DW)	72.60 (0.75) [72.28 - 72.79]	73.03 (0.75) [70.97 - 74.33]	-0.43 (1.05) [-1.61 - 1.82]	-4.96, 4.11	0.724
Moisture (% FW)	71.53 (0.58) [70.60 - 72.50]	71.17 (0.58) [70.00 - 72.10]	0.37 (0.83) [-1.50 - 2.50]	-3.19, 3.92	0.700
Neutral Detergent Fiber (% DW)	37.26 (1.43) [34.35 - 41.05]	32.98 (1.43) [32.26 - 33.67]	4.28 (1.89) [2.10 - 8.05]	-3.86, 12.42	0.151
Protein (% DW)	13.34 (0.51) [13.05 - 13.89]	12.97 (0.51) [11.85 - 14.16]	0.37 (0.72) [-1.10 - 2.04]	-2.74, 3.47	0.662

Table 1. Statistical Summary of Site CdT Soybean Forage Fiber and Proximate Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525)

	Difference (Test minus Control)				
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value
Component (Units) ¹					
Fiber and Proximate					
Total Fat (% DW)	5.32 (0.47) [4.77 - 5.71]	5.52 (0.47) [4.40 - 6.47]	-0.20 (0.67) [-1.70 - 1.31]	-3.07, 2.66	0.788
					Commercial (Range) [99% Tolerance Interval ²] (1.19 - 8.22) [0, 9.74]

¹DW = dry weight; FW = fresh weight; S.E. = standard error; CI = Confidence Interval.

²With 95% confidence, interval contains 99% of the values expressed in the population of commercial substances. Negative limits were set to zero.

Table 2. Statistical Summary of Site CdT Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525)

Component (Units) ¹	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Amino Acid (% DW)						
Alanine (% DW)	1.53 (0.017) [1.51 - 1.54]	1.56 (0.017) [1.51 - 1.58]	-0.023 (0.012) [-0.041 - 0.00038]	-0.077, 0.030	0.200	(1.34 - 1.78) [1.25, 1.92]
Arginine (% DW)	2.55 (0.036) [2.48 - 2.63]	2.55 (0.036) [2.51 - 2.58]	-0.0053 (0.040) [-0.062 - 0.071]	-0.18, 0.16	0.905	(2.15 - 3.23) [1.81, 3.62]
Aspartic Acid (% DW)	3.84 (0.045) [3.76 - 3.93]	3.94 (0.045) [3.86 - 4.00]	-0.10 (0.035) [-0.16 - -0.039]	-0.25, 0.051	0.104	(3.37 - 4.76) [3.02, 5.11]
Cystine (% DW)	0.62 (0.0081) [0.60 - 0.63]	0.62 (0.0081) [0.60 - 0.63]	0.0014 (0.011) [-0.027 - 0.028]	-0.048, 0.051	0.911	(0.53 - 0.64) [0.49, 0.69]
Glutamic Acid (% DW)	5.99 (0.083) [5.86 - 6.13]	6.17 (0.083) [6.00 - 6.29]	-0.19 (0.070) [-0.32 - -0.094]	-0.49, 0.11	0.115	(5.14 - 7.73) [4.42, 8.48]
Glycine (% DW)	1.52 (0.016) [1.50 - 1.54]	1.55 (0.016) [1.51 - 1.57]	-0.027 (0.0087) [-0.040 - -0.011]	-0.064, 0.010	0.089	(1.30 - 1.79) [1.19, 1.95]

Table 2. Statistical Summary of Site CdT Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

Component (Units) ¹	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Amino Acid (% DW)						
Histidine (% DW)	0.94 (0.012) [0.92 - 0.97]	0.94 (0.012) [0.92 - 0.96]	0.0024 (0.014) [-0.021 - 0.025]	-0.056, 0.061	0.875	(0.79 - 1.07) [0.74, 1.16]
Isoleucine (% DW)	1.61 (0.039) [1.57 - 1.64]	1.64 (0.039) [1.55 - 1.71]	-0.034 (0.038) [-0.11 - 0.022]	-0.20, 0.13	0.460	(1.37 - 2.00) [1.23, 2.15]
Leucine (% DW)	2.56 (0.031) [2.53 - 2.59]	2.63 (0.031) [2.55 - 2.69]	-0.073 (0.030) [-0.13 - -0.026]	-0.20, 0.057	0.137	(2.26 - 3.14) [2.06, 3.41]
Lysine (% DW)	2.31 (0.026) [2.27 - 2.34]	2.32 (0.026) [2.26 - 2.36]	-0.013 (0.019) [-0.051 - 0.012]	-0.096, 0.071	0.581	(2.00 - 2.63) [1.87, 2.81]
Methionine (% DW)	0.53 (0.0091) [0.51 - 0.54]	0.54 (0.0091) [0.52 - 0.55]	-0.0089 (0.013) [-0.035 - 0.024]	-0.064, 0.046	0.560	(0.46 - 0.59) [0.43, 0.63]
Phenylalanine (% DW)	1.71 (0.024) [1.68 - 1.74]	1.76 (0.024) [1.70 - 1.80]	-0.050 (0.024) [-0.097 - -0.025]	-0.15, 0.053	0.172	(1.50 - 2.11) [1.35, 2.31]

Table 2. Statistical Summary of Site CdT Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

Component (Units) ¹	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Amino Acid (% DW)						
Proline (% DW)	1.65 (0.026) [1.60 - 1.70]	1.68 (0.026) [1.65 - 1.73]	-0.027 (0.011) [-0.046 - -0.0075]	-0.075, 0.021	0.135	(1.43 - 2.03) [1.29, 2.21]
Serine (% DW)	1.69 (0.069) [1.59 - 1.80]	1.71 (0.069) [1.56 - 1.81]	-0.013 (0.097) [-0.22 - 0.24]	-0.43, 0.40	0.905	(1.55 - 2.05) [1.44, 2.15]
Threonine (% DW)	1.28 (0.034) [1.25 - 1.34]	1.33 (0.034) [1.26 - 1.39]	-0.050 (0.048) [-0.13 - 0.080]	-0.26, 0.16	0.406	(1.19 - 1.48) [1.12, 1.53]
Tryptophan (% DW)	0.40 (0.0088) [0.38 - 0.41]	0.42 (0.0088) [0.41 - 0.43]	-0.017 (0.0061) [-0.028 - -0.0070]	-0.043, 0.0094	0.109	(0.33 - 0.48) [0.30, 0.50]
Tyrosine (% DW)	1.22 (0.021) [1.18 - 1.27]	1.17 (0.021) [1.15 - 1.19]	0.048 (0.029) [-0.0086 - 0.12]	-0.079, 0.17	0.247	(1.07 - 1.39) [0.99, 1.49]
Valine (% DW)	1.72 (0.042) [1.69 - 1.75]	1.74 (0.042) [1.63 - 1.82]	-0.023 (0.049) [-0.11 - 0.065]	-0.24, 0.19	0.684	(1.45 - 2.13) [1.31, 2.29]

Table 2. Statistical Summary of Site CdT Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

Component (Units) ¹	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Fatty Acid (% Total FA)						
16:0 Palmitic (% Total FA)	2.31 (0.040) [2.29 - 2.32]	10.80 (0.040) [10.72 - 10.91]	-8.49 (0.047) [-8.59 - -8.43]	-8.70, -8.29	<0.001	(8.78 - 11.51) [7.62, 12.55]
18:0 Stearic (% Total FA)	3.17 (0.040) [3.09 - 3.23]	4.58 (0.040) [4.53 - 4.66]	-1.42 (0.038) [-1.47 - -1.34]	-1.58, -1.25	<0.001	(3.82 - 7.21) [2.87, 7.15]
18:1 Oleic (% Total FA)	76.44 (0.19) [76.35 - 76.60]	23.02 (0.19) [22.51 - 23.37]	53.42 (0.21) [53.19 - 53.85]	52.50, 54.34	<0.001	(20.77 - 27.19) [18.40, 30.22]
18:2 Linoleic (% Total FA)	10.09 (0.15) [9.94 - 10.22]	52.43 (0.15) [52.13 - 52.78]	-42.34 (0.11) [-42.56 - -42.19]	-42.83, -41.84	<0.001	(48.62 - 54.74) [47.75, 56.46]
18:3 Linolenic (% Total FA)	6.90 (0.047) [6.85 - 6.94]	8.15 (0.047) [8.08 - 8.28]	-1.25 (0.044) [-1.33 - -1.18]	-1.44, -1.06	0.001	(5.89 - 9.11) [4.97, 9.93]
20:0 Arachidic (% Total FA)	0.29 (0.0058) [0.28 - 0.29]	0.35 (0.0058) [0.34 - 0.36]	-0.063 (0.0082) [-0.082 - -0.046]	-0.099, -0.028	0.016	(0.28 - 0.54) [0.22, 0.53]

Table 2. Statistical Summary of Site CdT Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

Component (Units) ¹	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Fatty Acid (% Total FA)						
20:1 Eicosenoic (% Total FA)	0.36 (0.0056) [0.36 - 0.38]	0.21 (0.0056) [0.19 - 0.21]	0.16 (0.0045) [0.15 - 0.16]	0.14, 0.18	<0.001	(0.15 - 0.22) [0.13, 0.25]
22:0 Behenic (% Total FA)	0.28 (0.0046) [0.28 - 0.29]	0.30 (0.0046) [0.29 - 0.31]	-0.016 (0.0066) [-0.029 - -0.0044]	-0.045, 0.012	0.131	(0.29 - 0.46) [0.22, 0.47]
24:0 Lignoceric (% Total FA)	0.15 (0.0029) [0.14 - 0.15]	0.15 (0.0029) [0.15 - 0.16]	-0.0049 (0.00046) [-0.0055 - -0.0040]	-0.0069, -0.0030	0.008	(0.056 - 0.21) [0.030, 0.26]
Fiber						
Acid Detergent Fiber (% DW)	18.23 (0.32) [17.57 - 18.58]	16.27 (0.32) [15.69 - 16.74]	1.97 (0.45) [0.83 - 2.89]	0.014, 3.92	0.049	(12.46 - 21.25) [12.71, 19.29]
Neutral Detergent Fiber (% DW)	21.04 (0.45) [20.47 - 22.18]	17.99 (0.45) [17.71 - 18.54]	3.05 (0.30) [2.75 - 3.65]	1.78, 4.33	0.009	(12.25 - 20.89) [12.07, 21.51]
Proximate						
Ash (% DW)	6.37 (0.093) [6.13 - 6.54]	6.22 (0.093) [6.18 - 6.31]	0.15 (0.099) [-0.050 - 0.26]	-0.28, 0.57	0.274	(5.64 - 6.82) [5.26, 7.17]

Table 2. Statistical Summary of Site CdT Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Component (Units) ¹ Proximate						
Carbohydrates (% DW)	41.82 (0.20) [41.62 - 42.00]	40.05 (0.20) [39.64 - 40.52]	1.76 (0.23) [1.31 - 2.00]	0.78, 2.75	0.016	(32.79 - 42.29) [30.78, 45.86]
Moisture (% FW)	10.80 (0.35) [10.10 - 11.20]	10.87 (0.35) [10.20 - 11.40]	-0.067 (0.50) [-1.30 - 0.90]	-2.21, 2.08	0.905	(6.89 - 12.50) [5.51, 13.37]
Protein (% DW)	33.75 (0.33) [33.26 - 34.65]	34.22 (0.33) [34.04 - 34.41]	-0.47 (0.36) [-0.94 - 0.24]	-2.02, 1.08	0.320	(29.51 - 40.25) [26.12, 43.51]
Total Fat (% DW)	18.09 (0.25) [17.66 - 18.35]	19.52 (0.25) [18.96 - 19.82]	-1.43 (0.35) [-2.16 - -0.61]	-2.95, 0.083	0.055	(16.91 - 23.48) [15.35, 25.95]
Vitamin						
Vitamin E (mg/100g DW)	3.34 (0.13) [3.17 - 3.50]	4.03 (0.13) [3.74 - 4.19]	-0.69 (0.18) [-1.01 - -0.39]	-1.46, 0.068	0.059	(1.09 - 5.10) [0, 7.36]
Antinutrient						
Lectin (H.U./mg DW)	1.93 (0.74) [1.01 - 2.77]	3.12 (0.74) [2.20 - 4.93]	-1.19 (1.01) [-2.93 - 0.57]	-5.54, 3.15	0.359	(0.65 - 8.10) [0, 6.44]

Table 2. Statistical Summary of Site CdT Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Component (Units)¹						
Antinutrient						
Phytic Acid (% DW)	1.81 (0.10) [1.52 - 1.97]	1.79 (0.10) [1.78 - 1.81]	0.017 (0.14) [-0.26 - 0.16]	-0.59, 0.62	0.914	(1.42 - 2.27) [1.35, 2.35]
Raffinose (% DW)	0.51 (0.018) [0.50 - 0.54]	0.52 (0.018) [0.50 - 0.56]	-0.0095 (0.025) [-0.069 - 0.030]	-0.12, 0.099	0.741	(0.40 - 0.80) [0.27, 0.87]
Stachyose (% DW)	3.76 (0.15) [3.55 - 4.16]	3.10 (0.15) [3.04 - 3.21]	0.66 (0.15) [0.51 - 0.95]	0.027, 1.29	0.046	(2.30 - 4.53) [1.96, 4.41]
Trypsin Inhibitor (TIU/mg DW)	42.86 (3.21) [38.51 - 48.03]	43.65 (3.21) [37.36 - 49.78]	-0.79 (2.92) [-5.31 - 4.69]	-13.37, 11.80	0.812	(23.11 - 60.42) [8.75, 63.43]
Isoflavone						
Daidzein (µg/g DW)	1192.24 (52.19) [1145.72 - 1259.84]	1182.58 (52.19) [1092.43 - 1309.26]	9.66 (73.81) [-163.54 - 167.41]	-307.91, 327.23	0.907	(320.54 - 3061.22) [0, 3328.03]
Genistein (µg/g DW)	813.17 (33.64) [809.79 - 815.32]	825.33 (33.64) [751.67 - 914.22]	-12.17 (47.57) [-104.43 - 62.73]	-216.84, 192.50	0.822	(433.41 - 2301.59) [0, 2727.33]

Table 2. Statistical Summary of Site CdT Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

	Difference (Test minus Control)				Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value
Component (Units)¹					
Isoflavone					
Glycitein (µg/g DW)	140.40 (18.28) [90.89 - 176.80]	146.58 (18.28) [141.57 - 152.56]	-6.18 (25.85) [-61.67 - 35.23]	-117.41, 105.05	0.833
					(21.67 - 354.30) [0, 376.03]

¹DW = dry weight; FW = fresh weight; FA = fatty acid; S.E. = standard error; CI = Confidence Interval.

²With 95% confidence, interval contains 99% of the values expressed in the population of commercial substances. Negative limits were set to zero.

Table 3. Statistical Summary of Site MEL Soybean Forage Fiber and Proximate Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525)

Component (Units) ¹	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Fiber and Proximate						
Acid Detergent Fiber (% DW)	27.77 (1.88) [24.18 - 29.83]	27.46 (1.88) [25.10 - 31.32]	0.31 (1.52) [-1.49 - 3.34]	-6.24, 6.86	0.858	(23.18 - 42.11) [18.29, 41.02]
Ash (% DW)	8.58 (0.33) [8.32 - 8.86]	8.20 (0.33) [7.66 - 9.08]	0.38 (0.46) [-0.52 - 1.01]	-1.61, 2.38	0.497	(6.76 - 10.40) [6.78, 9.91]
Carbohydrates (% DW)	71.69 (1.41) [69.52 - 73.15]	71.00 (1.41) [67.88 - 73.56]	0.69 (2.00) [-2.05 - 5.27]	-7.91, 9.28	0.764	(63.74 - 80.60) [64.45, 80.50]
Moisture (% FW)	70.43 (0.26) [70.20 - 70.80]	69.90 (0.26) [69.40 - 70.50]	0.53 (0.37) [-0.20 - 1.40]	-1.06, 2.13	0.287	(65.80 - 82.00) [62.26, 83.45]
Neutral Detergent Fiber (% DW)	30.89 (1.70) [27.64 - 35.57]	32.58 (1.70) [32.19 - 33.01]	-1.69 (2.21) [-4.90 - 2.56]	-11.22, 7.84	0.524	(24.70 - 46.55) [22.57, 46.52]
Protein (% DW)	13.95 (1.60) [12.65 - 16.40]	14.11 (1.60) [11.63 - 17.85]	-0.16 (2.27) [-5.20 - 3.56]	-9.90, 9.59	0.951	(9.51 - 19.93) [7.38, 21.27]

Table 3. Statistical Summary of Site MEL Soybean Forage Fiber and Proximate Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525)

	Difference (Test minus Control)				
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value
Component (Units) ¹					
Fiber and Proximate					
Total Fat (% DW)	5.79 (0.31) [5.37 - 6.57]	6.76 (0.31) [6.49 - 7.19]	-0.97 (0.17) [-1.16 - -0.62]	-1.71, -0.22	0.030
					Commercial (Range) [99% Tolerance Interval ²] (1.19 - 8.22) [0, 9.74]

¹DW = dry weight; FW = fresh weight; S.E. = standard error; CI = Confidence Interval.

²With 95% confidence, interval contains 99% of the values expressed in the population of commercial substances. Negative limits were set to zero.

Table 4. Statistical Summary of Site MEL Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525)

Component (Units) ¹	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Amino Acid (% DW)						
Alanine (% DW)	1.62 (0.032) [1.54 - 1.68]	1.56 (0.032) [1.54 - 1.61]	0.052 (0.040) [-0.00088 - 0.13]	-0.12, 0.23	0.323	(1.34 - 1.78) [1.25, 1.92]
Arginine (% DW)	2.78 (0.097) [2.57 - 2.94]	2.63 (0.097) [2.54 - 2.79]	0.15 (0.12) [0.025 - 0.39]	-0.37, 0.66	0.341	(2.15 - 3.23) [1.81, 3.62]
Aspartic Acid (% DW)	4.14 (0.12) [3.87 - 4.36]	3.94 (0.12) [3.84 - 4.15]	0.19 (0.16) [0.026 - 0.52]	-0.51, 0.90	0.354	(3.37 - 4.76) [3.02, 5.11]
Cystine (% DW)	0.61 (0.013) [0.60 - 0.62]	0.58 (0.013) [0.55 - 0.61]	0.030 (0.018) [-0.0014 - 0.062]	-0.048, 0.11	0.239	(0.53 - 0.64) [0.49, 0.69]
Glutamic Acid (% DW)	6.59 (0.23) [6.09 - 7.02]	6.18 (0.23) [5.99 - 6.55]	0.41 (0.31) [0.098 - 1.02]	-0.90, 1.73	0.308	(5.14 - 7.73) [4.42, 8.48]
Glycine (% DW)	1.61 (0.042) [1.52 - 1.69]	1.55 (0.042) [1.52 - 1.62]	0.060 (0.053) [-0.00070 - 0.17]	-0.17, 0.29	0.374	(1.30 - 1.79) [1.19, 1.95]

Table 4. Statistical Summary of Site MEL Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

Component (Units) ¹	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Amino Acid (% DW)						
Histidine (% DW)	0.96 (0.025) [0.91 - 1.01]	0.91 (0.025) [0.89 - 0.95]	0.047 (0.033) [0.011 - 0.11]	-0.096, 0.19	0.295	(0.79 - 1.07) [0.74, 1.16]
Isoleucine (% DW)	1.74 (0.052) [1.61 - 1.84]	1.62 (0.052) [1.58 - 1.66]	0.12 (0.073) [-0.0014 - 0.26]	-0.19, 0.44	0.232	(1.37 - 2.00) [1.23, 2.15]
Leucine (% DW)	2.78 (0.072) [2.62 - 2.92]	2.65 (0.072) [2.60 - 2.76]	0.13 (0.096) [0.024 - 0.32]	-0.28, 0.54	0.308	(2.26 - 3.14) [2.06, 3.41]
Lysine (% DW)	2.41 (0.049) [2.31 - 2.50]	2.31 (0.049) [2.25 - 2.39]	0.10 (0.069) [0.016 - 0.25]	-0.19, 0.40	0.278	(2.00 - 2.63) [1.87, 2.81]
Methionine (% DW)	0.56 (0.0097) [0.53 - 0.57]	0.52 (0.0097) [0.51 - 0.53]	0.038 (0.013) [0.013 - 0.056]	-0.018, 0.094	0.100	(0.46 - 0.59) [0.43, 0.63]
Phenylalanine (% DW)	1.85 (0.053) [1.74 - 1.95]	1.78 (0.053) [1.73 - 1.87]	0.070 (0.074) [-0.0084 - 0.22]	-0.25, 0.39	0.445	(1.50 - 2.11) [1.35, 2.31]

Table 4. Statistical Summary of Site MEL Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

Component (Units) ¹	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Amino Acid (% DW)						
Proline (% DW)	1.81 (0.056) [1.69 - 1.89]	1.68 (0.056) [1.63 - 1.78]	0.13 (0.070) [0.043 - 0.27]	-0.18, 0.43	0.213	(1.43 - 2.03) [1.29, 2.21]
Serine (% DW)	1.79 (0.046) [1.72 - 1.86]	1.79 (0.046) [1.73 - 1.89]	-0.0013 (0.065) [-0.17 - 0.12]	-0.28, 0.28	0.985	(1.55 - 2.05) [1.44, 2.15]
Threonine (% DW)	1.34 (0.042) [1.31 - 1.39]	1.37 (0.042) [1.28 - 1.47]	-0.025 (0.053) [-0.13 - 0.031]	-0.25, 0.20	0.676	(1.19 - 1.48) [1.12, 1.53]
Tryptophan (% DW)	0.41 (0.0088) [0.39 - 0.43]	0.41 (0.0088) [0.40 - 0.42]	-0.0023 (0.012) [-0.028 - 0.019]	-0.056, 0.051	0.870	(0.33 - 0.48) [0.30, 0.50]
Tyrosine (% DW)	1.25 (0.023) [1.23 - 1.26]	1.24 (0.023) [1.20 - 1.30]	0.0014 (0.027) [-0.040 - 0.054]	-0.12, 0.12	0.963	(1.07 - 1.39) [0.99, 1.49]
Valine (% DW)	1.86 (0.054) [1.72 - 1.96]	1.73 (0.054) [1.68 - 1.76]	0.13 (0.077) [-0.014 - 0.28]	-0.20, 0.46	0.221	(1.45 - 2.13) [1.31, 2.29]

Table 4. Statistical Summary of Site MEL Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

Component (Units) ¹	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Fatty Acid (% Total FA)						
16:0 Palmitic (% Total FA)	2.39 (0.021) [2.35 - 2.42]	10.83 (0.021) [10.80 - 10.87]	-8.44 (0.029) [-8.47 - -8.38]	-8.56, -8.31	<0.001	(8.78 - 11.51) [7.62, 12.55]
18:0 Stearic (% Total FA)	3.33 (0.10) [3.20 - 3.47]	4.39 (0.10) [4.26 - 4.64]	-1.06 (0.15) [-1.32 - -0.79]	-1.69, -0.42	0.018	(3.82 - 7.21) [2.87, 7.15]
18:1 Oleic (% Total FA)	76.10 (0.22) [75.68 - 76.33]	22.31 (0.22) [21.86 - 22.61]	53.79 (0.31) [53.06 - 54.47]	52.45, 55.14	<0.001	(20.77 - 27.19) [18.40, 30.22]
18:2 Linoleic (% Total FA)	10.50 (0.22) [10.16 - 10.92]	53.48 (0.22) [53.22 - 53.89]	-42.98 (0.31) [-43.74 - -42.40]	-44.31, -41.66	<0.001	(48.62 - 54.74) [47.75, 56.46]
18:3 Linolenic (% Total FA)	6.58 (0.055) [6.53 - 6.65]	8.00 (0.055) [7.86 - 8.10]	-1.42 (0.076) [-1.56 - -1.31]	-1.74, -1.09	0.002	(5.89 - 9.11) [4.97, 9.93]
20:0 Arachidic (% Total FA)	0.30 (0.0058) [0.29 - 0.30]	0.34 (0.0058) [0.32 - 0.34]	-0.040 (0.0066) [-0.052 - -0.030]	-0.068, -0.012	0.026	(0.28 - 0.54) [0.22, 0.53]

Table 4. Statistical Summary of Site MEL Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

Component (Units) ¹	Difference (Test minus Control)				Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value
Fatty Acid (% Total FA)					
20:1 Eicosenoic (% Total FA)	0.35 (0.0050) [0.34 - 0.36]	0.20 (0.0050) [0.20 - 0.21]	0.14 (0.0063) [0.14 - 0.16]	0.12, 0.17	0.001 (0.15 - 0.22) [0.13, 0.25]
22:0 Behenic (% Total FA)	0.30 (0.0063) [0.29 - 0.30]	0.30 (0.0063) [0.28 - 0.31]	0.0014 (0.0089) [-0.016 - 0.020]	-0.037, 0.040	0.891 (0.29 - 0.46) [0.22, 0.47]
24:0 Lignoceric (% Total FA)	0.15 (0.0080) [0.14 - 0.17]	0.16 (0.0080) [0.15 - 0.16]	-0.0026 (0.0096) [-0.019 - 0.014]	-0.044, 0.039	0.812 (0.056 - 0.21) [0.030, 0.26]
Fiber					
Acid Detergent Fiber (% DW)	16.35 (0.29) [16.22 - 16.63]	16.74 (0.29) [16.03 - 17.32]	-0.38 (0.29) [-0.69 - 0.19]	-1.61, 0.85	0.313 (12.46 - 21.25) [12.71, 19.29]
Neutral Detergent Fiber (% DW)	20.24 (0.63) [18.92 - 21.65]	17.83 (0.63) [17.32 - 18.62]	2.42 (0.89) [0.30 - 4.33]	-1.40, 6.23	0.112 (12.25 - 20.89) [12.07, 21.51]
Proximate					
Ash (% DW)	6.11 (0.11) [5.99 - 6.26]	6.41 (0.11) [6.14 - 6.55]	-0.30 (0.14) [-0.56 - -0.073]	-0.90, 0.30	0.164 (5.64 - 6.82) [5.26, 7.17]

Table 4. Statistical Summary of Site MEL Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

	Difference (Test minus Control)				Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value
Component (Units)¹					
Proximate					
Carbohydrates (% DW)	39.70 (0.55) [38.85 - 41.07]	39.60 (0.55) [38.91 - 40.04]	0.10 (0.59) [-0.99 - 1.03]	-2.43, 2.64	0.876 (32.79 - 42.29) [30.78, 45.86]
Moisture (% FW)	10.93 (0.21) [10.40 - 11.20]	11.37 (0.21) [11.10 - 11.60]	-0.43 (0.15) [-0.70 - -0.20]	-1.06, 0.19	0.096 (6.89 - 12.50) [5.51, 13.37]
Protein (% DW)	35.56 (0.92) [33.59 - 36.94]	34.38 (0.92) [33.30 - 35.97]	1.18 (0.95) [0.18 - 3.08]	-2.89, 5.26	0.337 (29.51 - 40.25) [26.12, 43.51]
Total Fat (% DW)	18.64 (0.29) [18.24 - 19.08]	19.63 (0.29) [19.00 - 20.13]	-0.99 (0.31) [-1.51 - -0.42]	-2.35, 0.36	0.087 (16.91 - 23.48) [15.35, 25.95]
Vitamin					
Vitamin E (mg/100g DW)	3.26 (0.11) [3.15 - 3.45]	3.83 (0.11) [3.66 - 4.05]	-0.58 (0.043) [-0.64 - -0.49]	-0.76, -0.39	0.005 (1.09 - 5.10) [0, 7.36]
Antinutrient					
Lectin (H.U./mg DW)	1.84 (0.30) [1.61 - 2.14]	1.69 (0.30) [1.04 - 2.40]	0.15 (0.42) [-0.63 - 1.11]	-1.68, 1.98	0.757 (0.65 - 8.10) [0, 6.44]

Table 4. Statistical Summary of Site MEL Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Component (Units)¹						
Antinutrient						
Phytic Acid (% DW)	1.89 (0.099) [1.80 - 2.02]	1.90 (0.099) [1.66 - 2.08]	-0.0094 (0.14) [-0.27 - 0.18]	-0.60, 0.58	0.951	(1.42 - 2.27) [1.35, 2.35]
Raffinose (% DW)	0.57 (0.019) [0.54 - 0.61]	0.56 (0.019) [0.53 - 0.58]	0.018 (0.0085) [0.0046 - 0.034]	-0.019, 0.054	0.175	(0.40 - 0.80) [0.27, 0.87]
Stachyose (% DW)	3.68 (0.13) [3.56 - 3.77]	3.78 (0.13) [3.51 - 4.08]	-0.10 (0.18) [-0.53 - 0.26]	-0.87, 0.66	0.615	(2.30 - 4.53) [1.96, 4.41]
Trypsin Inhibitor (TIU/mg DW)	35.12 (2.90) [31.64 - 41.07]	36.06 (2.90) [31.67 - 41.28]	-0.93 (1.36) [-3.57 - 0.98]	-6.80, 4.93	0.564	(23.11 - 60.42) [8.75, 63.43]
Isoflavone						
Daidzein (µg/g DW)	2095.83 (90.09) [2060.81 - 2139.64]	2012.16 (90.09) [1844.77 - 2257.34]	83.67 (127.41) [-196.53 - 242.28]	-464.54, 631.88	0.578	(320.54 - 3061.22) [0, 3328.03]
Genistein (µg/g DW)	1362.28 (58.14) [1340.09 - 1385.14]	1286.17 (58.14) [1176.47 - 1444.70]	76.11 (82.22) [-104.61 - 208.66]	-277.67, 429.88	0.452	(433.41 - 2301.59) [0, 2727.33]

Table 4. Statistical Summary of Site MEL Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

	Difference (Test minus Control)				Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value
Component (Units) ¹					
Isoflavone					
Glycitein (µg/g DW)	144.06 (9.70) [132.88 - 151.79]	142.17 (9.70) [128.23 - 167.04]	1.90 (13.72) [-34.16 - 23.55]	-57.13, 60.93	0.902 (21.67 - 354.30) [0, 376.03]

¹DW = dry weight; FW = fresh weight; FA = fatty acid; S.E. = standard error; CI = Confidence Interval.

²With 95% confidence, interval contains 99% of the values expressed in the population of commercial substances. Negative limits were set to zero.

Table 5. Statistical Summary of Site QUI Soybean Forage Fiber and Proximate Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525)

Component (Units) ¹	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Fiber and Proximate						
Acid Detergent Fiber (% DW)	24.62 (1.87) [20.04 - 26.98]	22.74 (2.29) [22.72 - 22.76]	1.88 (2.96) [4.10 - 4.25]	-35.75, 39.51	0.639	(23.18 - 42.11) [18.29, 41.02]
Ash (% DW)	8.26 (0.32) [8.02 - 8.51]	7.87 (0.39) [7.24 - 8.49]	0.39 (0.50) [-0.24 - 1.27]	-5.97, 6.76	0.575	(6.76 - 10.40) [6.78, 9.91]
Carbohydrates (% DW)	71.07 (0.43) [70.11 - 71.67]	72.76 (0.53) [72.40 - 73.12]	-1.69 (0.68) [-3.01 - -0.73]	-10.36, 6.98	0.244	(63.74 - 80.60) [64.45, 80.50]
Moisture (% FW)	71.77 (0.47) [70.70 - 72.70]	72.10 (0.58) [72.10 - 72.10]	-0.33 (0.75) [-1.40 - -0.20]	-9.87, 9.20	0.733	(65.80 - 82.00) [62.26, 83.45]
Neutral Detergent Fiber (% DW)	30.94 (2.43) [26.12 - 33.59]	32.99 (2.51) [33.91 - 36.56]	-2.05 (1.09) [-2.96 - -0.80]	-15.95, 11.85	0.312	(24.70 - 46.55) [22.57, 46.52]
Protein (% DW)	16.36 (0.79) [15.22 - 18.10]	15.09 (0.97) [14.37 - 15.81]	1.27 (1.26) [-0.58 - 1.39]	-14.70, 17.24	0.496	(9.51 - 19.93) [7.38, 21.27]

Table 6. Statistical Summary of Site QUI Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525)

Component (Units) ¹	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Amino Acid (% DW)						
Alanine (% DW)	1.64 (0.031) [1.60 - 1.70]	1.68 (0.031) [1.63 - 1.66]	-0.036 (0.0029) [-0.039 - -0.033]	-0.072, 0.00038	0.050	(1.34 - 1.78) [1.25, 1.92]
Arginine (% DW)	2.96 (0.090) [2.82 - 3.12]	2.98 (0.091) [2.82 - 2.99]	-0.022 (0.028) [-0.052 - 0.0034]	-0.38, 0.33	0.577	(2.15 - 3.23) [1.81, 3.62]
Aspartic Acid (% DW)	4.31 (0.10) [4.16 - 4.49]	4.40 (0.11) [4.21 - 4.43]	-0.095 (0.053) [-0.16 - -0.051]	-0.77, 0.58	0.323	(3.37 - 4.76) [3.02, 5.11]
Cystine (% DW)	0.63 (0.0098) [0.60 - 0.64]	0.62 (0.011) [0.61 - 0.63]	0.0059 (0.010) [-0.0061 - 0.017]	-0.12, 0.14	0.666	(0.53 - 0.64) [0.49, 0.69]
Glutamic Acid (% DW)	6.85 (0.20) [6.54 - 7.19]	7.06 (0.20) [6.70 - 7.09]	-0.21 (0.058) [-0.27 - -0.16]	-0.94, 0.52	0.171	(5.14 - 7.73) [4.42, 8.48]
Glycine (% DW)	1.64 (0.029) [1.60 - 1.71]	1.65 (0.035) [1.65 - 1.65]	-0.012 (0.046) [-0.050 - -0.045]	-0.59, 0.57	0.837	(1.30 - 1.79) [1.19, 1.95]

Table 6. Statistical Summary of Site QUI Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

Component (Units) ¹	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Amino Acid (% DW)						
Histidine (% DW)	0.99 (0.024) [0.95 - 1.04]	1.01 (0.024) [0.97 - 1.01]	-0.018 (0.0035) [-0.021 - -0.014]	-0.062, 0.027	0.124	(0.79 - 1.07) [0.74, 1.16]
Isoleucine (% DW)	1.76 (0.054) [1.65 - 1.86]	1.87 (0.058) [1.80 - 1.86]	-0.10 (0.036) [-0.15 - -0.074]	-0.56, 0.36	0.214	(1.37 - 2.00) [1.23, 2.15]
Leucine (% DW)	2.88 (0.073) [2.77 - 3.01]	2.94 (0.074) [2.81 - 2.94]	-0.061 (0.022) [-0.085 - -0.041]	-0.34, 0.22	0.220	(2.26 - 3.14) [2.06, 3.41]
Lysine (% DW)	2.48 (0.043) [2.41 - 2.55]	2.50 (0.044) [2.42 - 2.51]	-0.019 (0.016) [-0.036 - -0.0050]	-0.22, 0.18	0.438	(2.00 - 2.63) [1.87, 2.81]
Methionine (% DW)	0.55 (0.0071) [0.54 - 0.57]	0.56 (0.0087) [0.55 - 0.57]	-0.0063 (0.011) [-0.022 - -0.0066]	-0.15, 0.14	0.677	(0.46 - 0.59) [0.43, 0.63]
Phenylalanine (% DW)	1.89 (0.053) [1.83 - 2.00]	1.93 (0.065) [1.88 - 1.99]	-0.044 (0.084) [-0.16 - -0.035]	-1.11, 1.03	0.695	(1.50 - 2.11) [1.35, 2.31]

Table 6. Statistical Summary of Site QUI Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

Component (Units) ¹	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Amino Acid (% DW)						
Proline (% DW)	1.85 (0.045) [1.77 - 1.92]	1.88 (0.045) [1.80 - 1.90]	-0.032 (0.0091) [-0.041 - -0.023]	-0.15, 0.083	0.176	(1.43 - 2.03) [1.29, 2.21]
Serine (% DW)	1.92 (0.051) [1.87 - 1.98]	1.83 (0.062) [1.74 - 1.92]	0.083 (0.080) [-0.053 - 0.16]	-0.93, 1.10	0.486	(1.55 - 2.05) [1.44, 2.15]
Threonine (% DW)	1.42 (0.023) [1.38 - 1.45]	1.37 (0.028) [1.34 - 1.41]	0.046 (0.037) [-0.025 - 0.11]	-0.42, 0.51	0.429	(1.19 - 1.48) [1.12, 1.53]
Tryptophan (% DW)	0.43 (0.0092) [0.41 - 0.45]	0.44 (0.011) [0.43 - 0.44]	-0.0041 (0.015) [-0.025 - -0.0021]	-0.19, 0.18	0.826	(0.33 - 0.48) [0.30, 0.50]
Tyrosine (% DW)	1.31 (0.018) [1.29 - 1.32]	1.28 (0.021) [1.25 - 1.32]	0.024 (0.028) [-0.024 - 0.059]	-0.33, 0.38	0.543	(1.07 - 1.39) [0.99, 1.49]
Valine (% DW)	1.86 (0.059) [1.73 - 1.96]	1.96 (0.066) [1.90 - 1.96]	-0.10 (0.053) [-0.17 - -0.064]	-0.77, 0.56	0.300	(1.45 - 2.13) [1.31, 2.29]

Table 6. Statistical Summary of Site QUI Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

Component (Units) ¹	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Fatty Acid (% Total FA)						
16:0 Palmitic (% Total FA)	2.30 (0.042) [2.25 - 2.37]	10.56 (0.051) [10.51 - 10.62]	-8.26 (0.066) [-8.37 - -8.13]	-9.10, -7.43	0.005	(8.78 - 11.51) [7.62, 12.55]
18:0 Stearic (% Total FA)	3.51 (0.19) [3.15 - 3.82]	4.82 (0.19) [4.47 - 4.85]	-1.31 (0.0088) [-1.32 - -1.30]	-1.42, -1.20	0.004	(3.82 - 7.21) [2.87, 7.15]
18:1 Oleic (% Total FA)	78.61 (0.41) [77.70 - 79.17]	24.95 (0.44) [24.34 - 25.08]	53.66 (0.26) [53.36 - 53.88]	50.35, 56.96	0.003	(20.77 - 27.19) [18.40, 30.22]
18:2 Linoleic (% Total FA)	8.75 (0.58) [7.85 - 10.02]	51.70 (0.63) [51.68 - 52.44]	-42.95 (0.44) [-43.30 - -42.42]	-48.50, -37.39	0.006	(48.62 - 54.74) [47.75, 56.46]
18:3 Linolenic (% Total FA)	5.64 (0.074) [5.55 - 5.71]	7.02 (0.082) [6.86 - 7.16]	-1.38 (0.063) [-1.45 - -1.32]	-2.19, -0.58	0.029	(5.89 - 9.11) [4.97, 9.93]
20:0 Arachidic (% Total FA)	0.33 (0.017) [0.30 - 0.36]	0.36 (0.017) [0.33 - 0.36]	-0.032 (0.0021) [-0.034 - -0.030]	-0.058, -0.0055	0.041	(0.28 - 0.54) [0.22, 0.53]

Table 6. Statistical Summary of Site QUI Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

Component (Units) ¹	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Fatty Acid (% Total FA)						
20:1 Eicosenoic (% Total FA)	0.38 (0.0089) [0.37 - 0.40]	0.20 (0.011) [0.20 - 0.20]	0.18 (0.014) [0.18 - 0.20]	0.0019, 0.36	0.049	(0.15 - 0.22) [0.13, 0.25]
22:0 Behenic (% Total FA)	0.31 (0.0094) [0.30 - 0.33]	0.31 (0.0095) [0.29 - 0.31]	0.0051 (0.0029) [0.0019 - 0.0078]	-0.032, 0.042	0.330	(0.29 - 0.46) [0.22, 0.47]
24:0 Lignoceric (% Total FA)	0.17 (0.0027) [0.17 - 0.17]	0.15 (0.0033) [0.15 - 0.16]	0.021 (0.0042) [0.015 - 0.027]	-0.032, 0.075	0.124	(0.056 - 0.21) [0.030, 0.26]
Fiber						
Acid Detergent Fiber (% DW)	18.15 (0.59) [17.23 - 19.31]	15.96 (0.73) [15.28 - 16.65]	2.19 (0.94) [1.28 - 4.03]	-9.75, 14.13	0.258	(12.46 - 21.25) [12.71, 19.29]
Neutral Detergent Fiber (% DW)	18.01 (0.71) [16.93 - 19.69]	16.53 (0.87) [16.18 - 16.87]	1.48 (1.13) [0.054 - 1.23]	-12.86, 15.82	0.414	(12.25 - 20.89) [12.07, 21.51]
Proximate						
Ash (% DW)	6.22 (0.089) [6.06 - 6.42]	6.10 (0.10) [6.13 - 6.18]	0.12 (0.091) [0.061 - 0.24]	-1.04, 1.28	0.414	(5.64 - 6.82) [5.26, 7.17]

Table 6. Statistical Summary of Site QUI Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Component (Units)¹						
Proximate						
Carbohydrates (% DW)	37.54 (0.51) [36.69 - 38.62]	37.41 (0.55) [37.46 - 38.09]	0.12 (0.34) [-0.15 - 0.53]	-4.20, 4.44	0.779	(32.79 - 42.29) [30.78, 45.86]
Moisture (% FW)	10.40 (0.097) [10.20 - 10.60]	11.05 (0.12) [11.00 - 11.10]	-0.65 (0.15) [-0.90 - -0.60]	-2.60, 1.30	0.147	(6.89 - 12.50) [5.51, 13.37]
Protein (% DW)	37.05 (0.83) [35.60 - 38.59]	37.11 (0.84) [35.96 - 36.78]	-0.055 (0.27) [-0.35 - 0.19]	-3.50, 3.39	0.873	(29.51 - 40.25) [26.12, 43.51]
Total Fat (% DW)	19.20 (0.21) [18.68 - 19.49]	19.73 (0.26) [19.69 - 19.78]	-0.53 (0.34) [-0.36 - -0.20]	-4.80, 3.73	0.356	(16.91 - 23.48) [15.35, 25.95]
Vitamin						
Vitamin E (mg/100g DW)	3.93 (0.19) [3.70 - 4.36]	3.72 (0.23) [3.61 - 3.82]	0.21 (0.29) [-0.13 - 0.76]	-3.51, 3.93	0.599	(1.09 - 5.10) [0, 7.36]
Antinutrient						
Lectin (H.U./mg DW)	1.45 (0.82) [0.72 - 2.03]	3.92 (1.00) [2.32 - 5.53]	-2.47 (1.30) [-4.80 - -0.29]	-18.93, 13.99	0.307	(0.65 - 8.10) [0, 6.44]

Table 6. Statistical Summary of Site QUI Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Component (Units)¹						
Antinutrient						
Phytic Acid (% DW)	1.89 (0.12) [1.73 - 2.13]	1.97 (0.12) [1.90 - 2.19]	-0.085 (0.024) [-0.11 - -0.059]	-0.39, 0.22	0.178	(1.42 - 2.27) [1.35, 2.35]
Raffinose (% DW)	0.60 (0.023) [0.56 - 0.64]	0.55 (0.029) [0.52 - 0.57]	0.049 (0.037) [-0.015 - 0.12]	-0.42, 0.52	0.412	(0.40 - 0.80) [0.27, 0.87]
Stachyose (% DW)	4.08 (0.31) [3.43 - 4.48]	3.84 (0.38) [3.52 - 4.16]	0.24 (0.49) [0.18 - 0.96]	-5.93, 6.42	0.703	(2.30 - 4.53) [1.96, 4.41]
Trypsin Inhibitor (TIU/mg DW)	42.52 (5.28) [33.22 - 52.01]	40.77 (5.31) [41.51 - 49.21]	1.75 (0.99) [0.81 - 2.80]	-10.88, 14.38	0.329	(23.11 - 60.42) [8.75, 63.43]
Isoflavone						
Daidzein (µg/g DW)	1346.63 (67.43) [1230.43 - 1450.89]	1411.91 (69.07) [1394.83 - 1539.33]	-65.28 (26.14) [-88.43 - -36.25]	-397.44, 266.88	0.242	(320.54 - 3061.22) [0, 3328.03]
Genistein (µg/g DW)	952.69 (44.70) [882.55 - 1005.58]	932.29 (52.06) [881.89 - 1020.22]	20.40 (50.70) [-14.64 - 88.04]	-623.77, 664.56	0.756	(433.41 - 2301.59) [0, 2727.33]

Table 6. Statistical Summary of Site QUI Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

	Difference (Test minus Control)				Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value
Component (Units)¹					
Isoflavone					
Glycitein (µg/g DW)	87.69 (17.12) [49.11 - 108.04]	98.58 (18.14) [72.10 - 109.21]	-10.89 (10.64) [-22.99 - -1.18]	-146.05, 124.28	0.492 (21.67 - 354.30) [0, 376.03]

¹DW = dry weight; FW = fresh weight; FA = fatty acid; S.E. = standard error; CI = Confidence Interval.

²With 95% confidence, interval contains 99% of the values expressed in the population of commercial substances. Negative limits were set to zero.

Table 7. Statistical Summary of Site RAN Soybean Forage Fiber and Proximate Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525)

Component (Units) ¹	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Fiber and Proximate						
Acid Detergent Fiber (% DW)	32.11 (2.53) [31.02 - 33.39]	29.37 (2.53) [24.37 - 36.13]	2.73 (3.57) [-4.22 - 9.02]	-12.65, 18.11	0.524	(23.18 - 42.11) [18.29, 41.02]
Ash (% DW)	9.64 (0.30) [8.81 - 10.11]	8.56 (0.30) [8.40 - 8.67]	1.07 (0.42) [0.14 - 1.60]	-0.75, 2.90	0.126	(6.76 - 10.40) [6.78, 9.91]
Carbohydrates (% DW)	69.77 (0.62) [68.94 - 71.06]	72.09 (0.62) [70.97 - 72.89]	-2.32 (0.40) [-3.10 - -1.83]	-4.02, -0.62	0.027	(63.74 - 80.60) [64.45, 80.50]
Moisture (% FW)	78.03 (1.32) [76.50 - 81.10]	75.53 (1.32) [73.90 - 77.50]	2.50 (1.86) [-1.00 - 7.20]	-5.50, 10.50	0.311	(65.80 - 82.00) [62.26, 83.45]
Neutral Detergent Fiber (% DW)	41.60 (1.83) [39.19 - 46.30]	36.03 (1.83) [33.91 - 37.55]	5.58 (1.75) [2.70 - 8.75]	-1.97, 13.12	0.086	(24.70 - 46.55) [22.57, 46.52]
Protein (% DW)	16.73 (0.63) [15.19 - 17.78]	14.71 (0.63) [14.02 - 15.48]	2.02 (0.89) [0.57 - 3.75]	-1.82, 5.87	0.151	(9.51 - 19.93) [7.38, 21.27]

Table 7. Statistical Summary of Site RAN Soybean Forage Fiber and Proximate Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525)

	Difference (Test minus Control)				
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value
Component (Units) ¹					
Fiber and Proximate					
Total Fat (% DW)	3.87 (0.48) [2.83 - 4.89]	4.66 (0.48) [4.05 - 5.06]	-0.80 (0.67) [-2.23 - 0.015]	-3.69, 2.10	0.358
					Commercial (Range) [99% Tolerance Interval ²] (1.19 - 8.22) [0, 9.74]

¹DW = dry weight; FW = fresh weight; S.E. = standard error; CI = Confidence Interval.

²With 95% confidence, interval contains 99% of the values expressed in the population of commercial substances. Negative limits were set to zero.

Table 8. Statistical Summary of Site RAN Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525)

Component (Units) ¹	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Amino Acid (% DW)						
Alanine (% DW)	1.66 (0.021) [1.62 - 1.70]	1.62 (0.021) [1.59 - 1.66]	0.036 (0.027) [-0.0069 - 0.085]	-0.080, 0.15	0.314	(1.34 - 1.78) [1.25, 1.92]
Arginine (% DW)	3.08 (0.032) [3.01 - 3.16]	2.95 (0.032) [2.94 - 2.97]	0.13 (0.045) [0.043 - 0.22]	-0.062, 0.33	0.099	(2.15 - 3.23) [1.81, 3.62]
Aspartic Acid (% DW)	4.35 (0.036) [4.30 - 4.44]	4.24 (0.036) [4.20 - 4.29]	0.11 (0.051) [0.026 - 0.23]	-0.11, 0.33	0.173	(3.37 - 4.76) [3.02, 5.11]
Cystine (% DW)	0.60 (0.011) [0.57 - 0.62]	0.58 (0.011) [0.57 - 0.59]	0.022 (0.011) [0.00097 - 0.033]	-0.024, 0.069	0.171	(0.53 - 0.64) [0.49, 0.69]
Glutamic Acid (% DW)	7.00 (0.060) [6.92 - 7.14]	6.82 (0.060) [6.73 - 6.89]	0.17 (0.085) [0.039 - 0.41]	-0.19, 0.54	0.177	(5.14 - 7.73) [4.42, 8.48]
Glycine (% DW)	1.68 (0.030) [1.62 - 1.74]	1.63 (0.030) [1.58 - 1.67]	0.046 (0.020) [0.015 - 0.084]	-0.041, 0.13	0.150	(1.30 - 1.79) [1.19, 1.95]

Table 8. Statistical Summary of Site RAN Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

Component (Units) ¹	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Amino Acid (% DW)						
Histidine (% DW)	1.02 (0.0088) [1.01 - 1.04]	0.99 (0.0088) [0.98 - 1.01]	0.031 (0.012) [0.0086 - 0.060]	-0.022, 0.085	0.127	(0.79 - 1.07) [0.74, 1.16]
Isoleucine (% DW)	1.83 (0.022) [1.78 - 1.88]	1.76 (0.022) [1.74 - 1.77]	0.069 (0.031) [0.0045 - 0.14]	-0.063, 0.20	0.153	(1.37 - 2.00) [1.23, 2.15]
Leucine (% DW)	2.91 (0.022) [2.89 - 2.97]	2.86 (0.022) [2.85 - 2.90]	0.049 (0.031) [-0.0094 - 0.12]	-0.085, 0.18	0.256	(2.26 - 3.14) [2.06, 3.41]
Lysine (% DW)	2.49 (0.021) [2.46 - 2.55]	2.43 (0.021) [2.41 - 2.45]	0.065 (0.030) [0.018 - 0.13]	-0.065, 0.19	0.164	(2.00 - 2.63) [1.87, 2.81]
Methionine (% DW)	0.57 (0.0092) [0.55 - 0.58]	0.53 (0.0092) [0.52 - 0.54]	0.035 (0.010) [0.015 - 0.049]	-0.0098, 0.079	0.078	(0.46 - 0.59) [0.43, 0.63]
Phenylalanine (% DW)	1.95 (0.013) [1.93 - 1.98]	1.92 (0.013) [1.90 - 1.94]	0.028 (0.018) [-0.0066 - 0.075]	-0.050, 0.11	0.265	(1.50 - 2.11) [1.35, 2.31]

Table 8. Statistical Summary of Site RAN Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

Component (Units) ¹	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Amino Acid (% DW)						
Proline (% DW)	1.92 (0.018) [1.88 - 1.95]	1.83 (0.018) [1.80 - 1.85]	0.093 (0.025) [0.026 - 0.14]	-0.014, 0.20	0.064	(1.43 - 2.03) [1.29, 2.21]
Serine (% DW)	1.79 (0.041) [1.74 - 1.90]	1.91 (0.041) [1.88 - 1.94]	-0.11 (0.058) [-0.20 - 0.0033]	-0.37, 0.14	0.186	(1.55 - 2.05) [1.44, 2.15]
Threonine (% DW)	1.36 (0.014) [1.33 - 1.39]	1.36 (0.014) [1.34 - 1.38]	-0.00098 (0.020) [-0.052 - 0.042]	-0.088, 0.086	0.965	(1.19 - 1.48) [1.12, 1.53]
Tryptophan (% DW)	0.45 (0.0040) [0.44 - 0.46]	0.44 (0.0040) [0.44 - 0.44]	0.0065 (0.0057) [-0.0022 - 0.022]	-0.018, 0.031	0.372	(0.33 - 0.48) [0.30, 0.50]
Tyrosine (% DW)	1.29 (0.014) [1.26 - 1.33]	1.30 (0.014) [1.29 - 1.31]	-0.0067 (0.014) [-0.026 - 0.019]	-0.065, 0.052	0.670	(1.07 - 1.39) [0.99, 1.49]
Valine (% DW)	1.97 (0.023) [1.91 - 2.02]	1.89 (0.023) [1.87 - 1.91]	0.080 (0.033) [0.026 - 0.15]	-0.063, 0.22	0.137	(1.45 - 2.13) [1.31, 2.29]

Table 8. Statistical Summary of Site RAN Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

Component (Units) ¹	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Fatty Acid (% Total FA)						
16:0 Palmitic (% Total FA)	2.40 (0.0088) [2.39 - 2.40]	10.96 (0.0088) [10.94 - 10.98]	-8.56 (0.012) [-8.58 - -8.54]	-8.61, -8.51	<0.001	(8.78 - 11.51) [7.62, 12.55]
18:0 Stearic (% Total FA)	3.34 (0.032) [3.28 - 3.41]	4.50 (0.032) [4.47 - 4.55]	-1.16 (0.045) [-1.22 - -1.07]	-1.35, -0.96	0.001	(3.82 - 7.21) [2.87, 7.15]
18:1 Oleic (% Total FA)	74.69 (0.59) [73.13 - 75.98]	21.53 (0.59) [21.41 - 21.63]	53.15 (0.79) [51.71 - 54.43]	49.76, 56.55	<0.001	(20.77 - 27.19) [18.40, 30.22]
18:2 Linoleic (% Total FA)	11.32 (0.42) [10.37 - 12.42]	53.73 (0.42) [53.67 - 53.81]	-42.41 (0.57) [-43.33 - -41.38]	-44.84, -39.97	<0.001	(48.62 - 54.74) [47.75, 56.46]
18:3 Linolenic (% Total FA)	7.32 (0.19) [6.87 - 7.81]	8.43 (0.19) [8.40 - 8.47]	-1.11 (0.27) [-1.60 - -0.59]	-2.28, 0.066	0.055	(5.89 - 9.11) [4.97, 9.93]
20:0 Arachidic (% Total FA)	0.28 (0.0036) [0.28 - 0.29]	0.33 (0.0036) [0.32 - 0.33]	-0.043 (0.0051) [-0.053 - -0.031]	-0.065, -0.021	0.014	(0.28 - 0.54) [0.22, 0.53]

Table 8. Statistical Summary of Site RAN Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

Component (Units) ¹	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Fatty Acid (% Total FA)						
20:1 Eicosenoic (% Total FA)	0.29 (0.0087) [0.27 - 0.31]	0.16 (0.0087) [0.15 - 0.16]	0.13 (0.0081) [0.12 - 0.15]	0.096, 0.17	0.003	(0.15 - 0.22) [0.13, 0.25]
22:0 Behenic (% Total FA)	0.28 (0.0041) [0.28 - 0.29]	0.30 (0.0041) [0.30 - 0.30]	-0.016 (0.0047) [-0.021 - -0.0062]	-0.036, 0.0048	0.080	(0.29 - 0.46) [0.22, 0.47]
24:0 Lignoceric (% Total FA)	0.069 (0.0011) [0.066 - 0.071]	0.067 (0.0011) [0.067 - 0.068]	0.0017 (0.0012) [-0.00065 - 0.0032]	-0.0034, 0.0069	0.285	(0.056 - 0.21) [0.030, 0.26]
Fiber						
Acid Detergent Fiber (% DW)	16.32 (0.34) [15.71 - 16.78]	13.94 (0.34) [13.36 - 14.58]	2.38 (0.11) [2.20 - 2.58]	1.91, 2.85	0.002	(12.46 - 21.25) [12.71, 19.29]
Neutral Detergent Fiber (% DW)	15.14 (0.91) [13.41 - 16.48]	16.40 (0.91) [14.61 - 17.51]	-1.26 (0.39) [-1.97 - -0.61]	-2.95, 0.43	0.085	(12.25 - 20.89) [12.07, 21.51]
Proximate						
Ash (% DW)	5.53 (0.088) [5.46 - 5.63]	5.68 (0.088) [5.48 - 5.88]	-0.14 (0.12) [-0.42 - 0.15]	-0.68, 0.39	0.370	(5.64 - 6.82) [5.26, 7.17]

Table 8. Statistical Summary of Site RAN Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Component (Units)¹						
Proximate						
Carbohydrates (% DW)	40.12 (0.24) [39.56 - 40.64]	39.60 (0.24) [39.41 - 39.84]	0.52 (0.34) [-0.28 - 1.23]	-0.93, 1.97	0.262	(32.79 - 42.29) [30.78, 45.86]
Moisture (% FW)	9.52 (0.43) [8.96 - 10.60]	12.03 (0.43) [11.50 - 12.40]	-2.51 (0.61) [-3.40 - -0.90]	-5.12, 0.090	0.053	(6.89 - 12.50) [5.51, 13.37]
Protein (% DW)	37.54 (0.20) [37.35 - 37.70]	36.87 (0.20) [36.56 - 37.40]	0.67 (0.19) [0.29 - 0.94]	-0.16, 1.51	0.074	(29.51 - 40.25) [26.12, 43.51]
Total Fat (% DW)	16.83 (0.21) [16.55 - 17.36]	17.85 (0.21) [17.63 - 18.11]	-1.01 (0.30) [-1.52 - -0.45]	-2.30, 0.27	0.077	(16.91 - 23.48) [15.35, 25.95]
Vitamin						
Vitamin E (mg/100g DW)	1.44 (0.094) [1.23 - 1.64]	1.81 (0.094) [1.69 - 1.91]	-0.38 (0.094) [-0.47 - -0.19]	-0.78, 0.026	0.056	(1.09 - 5.10) [0, 7.36]
Antinutrient						
Lectin (H.U./mg DW)	3.57 (0.50) [3.30 - 3.77]	1.36 (0.50) [0.61 - 2.73]	2.21 (0.61) [1.04 - 3.04]	-0.39, 4.82	0.067	(0.65 - 8.10) [0, 6.44]

Table 8. Statistical Summary of Site RAN Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Component (Units)¹						
Antinutrient						
Phytic Acid (% DW)	1.62 (0.032) [1.61 - 1.63]	1.72 (0.032) [1.63 - 1.77]	-0.10 (0.042) [-0.14 - -0.016]	-0.28, 0.079	0.139	(1.42 - 2.27) [1.35, 2.35]
Raffinose (% DW)	0.52 (0.017) [0.48 - 0.56]	0.56 (0.017) [0.55 - 0.57]	-0.044 (0.023) [-0.088 - -0.011]	-0.14, 0.056	0.198	(0.40 - 0.80) [0.27, 0.87]
Stachyose (% DW)	3.79 (0.21) [3.39 - 4.35]	3.70 (0.21) [3.56 - 3.80]	0.084 (0.30) [-0.35 - 0.79]	-1.20, 1.37	0.804	(2.30 - 4.53) [1.96, 4.41]
Trypsin Inhibitor (TIU/mg DW)	29.38 (1.10) [26.73 - 31.10]	28.54 (1.10) [27.23 - 29.95]	0.85 (0.95) [-0.50 - 2.67]	-3.23, 4.92	0.465	(23.11 - 60.42) [8.75, 63.43]
Isoflavone						
Daidzein (µg/g DW)	1915.89 (53.73) [1868.13 - 1946.31]	1947.43 (53.73) [1803.65 - 2027.33]	-31.54 (48.74) [-94.12 - 64.48]	-241.26, 178.18	0.583	(320.54 - 3061.22) [0, 3328.03]
Genistein (µg/g DW)	1186.26 (34.98) [1164.84 - 1208.26]	1149.45 (34.98) [1054.79 - 1209.04]	36.81 (39.06) [-23.36 - 110.04]	-131.24, 204.87	0.445	(433.41 - 2301.59) [0, 2727.33]

Table 8. Statistical Summary of Site RAN Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

	Difference (Test minus Control)				Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value
Component (Units)¹					
Isoflavone					
Glycitein (µg/g DW)	117.22 (15.47) [79.19 - 140.66]	130.37 (15.47) [110.84 - 146.92]	-13.15 (21.88) [-54.14 - 29.81]	-107.29, 80.99	0.608
					(21.67 - 354.30) [0, 376.03]

¹DW = dry weight; FW = fresh weight; FA = fatty acid; S.E. = standard error; CI = Confidence Interval.

²With 95% confidence, interval contains 99% of the values expressed in the population of commercial substances. Negative limits were set to zero.

Table 9. Statistical Summary of Site SFR Soybean Forage Fiber and Proximate Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525)

Component (Units) ¹	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Fiber and Proximate						
Acid Detergent Fiber (% DW)	34.33 (3.08) [30.23 - 42.14]	38.52 (3.08) [34.68 - 40.67]	-4.19 (4.36) [-10.04 - 7.47]	-22.93, 14.55	0.437	(23.18 - 42.11) [18.29, 41.02]
Ash (% DW)	8.54 (0.51) [7.39 - 9.74]	7.73 (0.51) [7.21 - 8.02]	0.81 (0.73) [-0.63 - 1.79]	-2.31, 3.94	0.379	(6.76 - 10.40) [6.78, 9.91]
Carbohydrates (% DW)	76.37 (1.00) [74.24 - 78.93]	78.35 (1.00) [77.70 - 78.99]	-1.98 (1.42) [-4.74 - 1.23]	-8.09, 4.13	0.297	(63.74 - 80.60) [64.45, 80.50]
Moisture (% FW)	72.87 (0.39) [72.00 - 73.60]	72.60 (0.39) [72.20 - 73.20]	0.27 (0.47) [-0.20 - 1.20]	-1.74, 2.27	0.625	(65.80 - 82.00) [62.26, 83.45]
Neutral Detergent Fiber (% DW)	38.24 (1.13) [37.27 - 38.89]	43.34 (1.13) [40.65 - 45.90]	-5.10 (1.53) [-7.01 - -2.08]	-11.67, 1.48	0.079	(24.70 - 46.55) [22.57, 46.52]
Protein (% DW)	9.84 (0.24) [9.25 - 10.42]	9.77 (0.24) [9.71 - 9.81]	0.070 (0.32) [-0.46 - 0.63]	-1.29, 1.43	0.845	(9.51 - 19.93) [7.38, 21.27]

Table 9. Statistical Summary of Site SFR Soybean Forage Fiber and Proximate Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525)

	Difference (Test minus Control)				
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value
Component (Units) ¹					
Fiber and Proximate					
Total Fat (% DW)	5.25 (0.64) [4.36 - 7.01]	4.31 (0.64) [3.99 - 4.75]	0.93 (0.91) [-0.39 - 2.80]	-2.98, 4.84	0.413
					(1.19 - 8.22) [0, 9.74]

¹DW = dry weight; FW = fresh weight; S.E. = standard error; CI = Confidence Interval.

²With 95% confidence, interval contains 99% of the values expressed in the population of commercial substances. Negative limits were set to zero.

Table 10. Statistical Summary of Site SFR Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525)

Component (Units) ¹	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Difference (Test minus Control)			Commercial (Range) [99% Tolerance Interval ²]
			Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Amino Acid (% DW)						
Alanine (% DW)	1.51 (0.011) [1.49 - 1.54]	1.44 (0.011) [1.43 - 1.45]	0.067 (0.011) [0.055 - 0.088]	0.021, 0.11	0.024	(1.34 - 1.78) [1.25, 1.92]
Arginine (% DW)	2.52 (0.048) [2.43 - 2.64]	2.34 (0.048) [2.31 - 2.39]	0.18 (0.040) [0.11 - 0.24]	0.0051, 0.35	0.047	(2.15 - 3.23) [1.81, 3.62]
Aspartic Acid (% DW)	3.76 (0.054) [3.67 - 3.88]	3.56 (0.054) [3.51 - 3.65]	0.20 (0.019) [0.17 - 0.23]	0.11, 0.28	0.009	(3.37 - 4.76) [3.02, 5.11]
Cystine (% DW)	0.61 (0.010) [0.60 - 0.62]	0.57 (0.010) [0.55 - 0.59]	0.043 (0.015) [0.0062 - 0.073]	-0.020, 0.11	0.098	(0.53 - 0.64) [0.49, 0.69]
Glutamic Acid (% DW)	5.90 (0.11) [5.72 - 6.12]	5.53 (0.11) [5.42 - 5.71]	0.37 (0.034) [0.30 - 0.41]	0.22, 0.51	0.008	(5.14 - 7.73) [4.42, 8.48]
Glycine (% DW)	1.49 (0.015) [1.47 - 1.54]	1.42 (0.015) [1.41 - 1.43]	0.078 (0.022) [0.055 - 0.12]	-0.016, 0.17	0.069	(1.30 - 1.79) [1.19, 1.95]

Table 10. Statistical Summary of Site SFR Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

Component (Units) ¹	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Amino Acid (% DW)						
Histidine (% DW)	0.90 (0.014) [0.88 - 0.94]	0.85 (0.014) [0.84 - 0.87]	0.050 (0.0069) [0.043 - 0.064]	0.021, 0.080	0.018	(0.79 - 1.07) [0.74, 1.16]
Isoleucine (% DW)	1.60 (0.029) [1.56 - 1.66]	1.51 (0.029) [1.45 - 1.54]	0.093 (0.030) [0.032 - 0.12]	-0.037, 0.22	0.091	(1.37 - 2.00) [1.23, 2.15]
Leucine (% DW)	2.54 (0.036) [2.47 - 2.61]	2.41 (0.036) [2.37 - 2.47]	0.12 (0.015) [0.095 - 0.15]	0.059, 0.19	0.014	(2.26 - 3.14) [2.06, 3.41]
Lysine (% DW)	2.25 (0.026) [2.19 - 2.30]	2.13 (0.026) [2.10 - 2.17]	0.11 (0.010) [0.097 - 0.13]	0.070, 0.16	0.007	(2.00 - 2.63) [1.87, 2.81]
Methionine (% DW)	0.53 (0.0080) [0.52 - 0.55]	0.50 (0.0080) [0.49 - 0.51]	0.037 (0.011) [0.0074 - 0.056]	-0.011, 0.086	0.081	(0.46 - 0.59) [0.43, 0.63]
Phenylalanine (% DW)	1.68 (0.023) [1.64 - 1.73]	1.60 (0.023) [1.58 - 1.64]	0.077 (0.011) [0.056 - 0.089]	0.030, 0.12	0.019	(1.50 - 2.11) [1.35, 2.31]

Table 10. Statistical Summary of Site SFR Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

Component (Units) ¹	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Amino Acid (% DW)						
Proline (% DW)	1.62 (0.023) [1.59 - 1.66]	1.55 (0.023) [1.52 - 1.60]	0.078 (0.012) [0.065 - 0.10]	0.028, 0.13	0.021	(1.43 - 2.03) [1.29, 2.21]
Serine (% DW)	1.56 (0.063) [1.49 - 1.68]	1.58 (0.063) [1.45 - 1.68]	-0.017 (0.089) [-0.15 - 0.23]	-0.40, 0.36	0.863	(1.55 - 2.05) [1.44, 2.15]
Threonine (% DW)	1.24 (0.022) [1.20 - 1.28]	1.22 (0.022) [1.18 - 1.25]	0.022 (0.032) [-0.044 - 0.10]	-0.11, 0.16	0.559	(1.19 - 1.48) [1.12, 1.53]
Tryptophan (% DW)	0.39 (0.011) [0.37 - 0.41]	0.37 (0.011) [0.35 - 0.38]	0.024 (0.016) [-0.0073 - 0.046]	-0.045, 0.092	0.276	(0.33 - 0.48) [0.30, 0.50]
Tyrosine (% DW)	1.18 (0.0097) [1.17 - 1.20]	1.12 (0.0097) [1.10 - 1.13]	0.064 (0.014) [0.039 - 0.10]	0.0052, 0.12	0.042	(1.07 - 1.39) [0.99, 1.49]
Valine (% DW)	1.72 (0.031) [1.69 - 1.79]	1.61 (0.031) [1.55 - 1.64]	0.12 (0.036) [0.044 - 0.16]	-0.039, 0.27	0.084	(1.45 - 2.13) [1.31, 2.29]

Table 10. Statistical Summary of Site SFR Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

Component (Units) ¹	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Fatty Acid (% Total FA)						
16:0 Palmitic (% Total FA)	2.42 (0.029) [2.40 - 2.44]	11.00 (0.029) [10.95 - 11.08]	-8.58 (0.042) [-8.68 - -8.53]	-8.76, -8.40	<0.001	(8.78 - 11.51) [7.62, 12.55]
18:0 Stearic (% Total FA)	3.22 (0.084) [3.07 - 3.41]	4.31 (0.084) [4.24 - 4.44]	-1.09 (0.044) [-1.17 - -1.03]	-1.28, -0.90	0.001	(3.82 - 7.21) [2.87, 7.15]
18:1 Oleic (% Total FA)	76.49 (0.43) [75.33 - 77.21]	22.42 (0.43) [22.16 - 22.65]	54.07 (0.60) [52.87 - 55.05]	51.47, 56.67	<0.001	(20.77 - 27.19) [18.40, 30.22]
18:2 Linoleic (% Total FA)	9.82 (0.27) [9.33 - 10.55]	52.84 (0.27) [52.75 - 52.98]	-43.02 (0.38) [-43.65 - -42.21]	-44.64, -41.39	<0.001	(48.62 - 54.74) [47.75, 56.46]
18:3 Linolenic (% Total FA)	6.98 (0.11) [6.79 - 7.26]	8.49 (0.11) [8.41 - 8.60]	-1.50 (0.15) [-1.80 - -1.20]	-2.16, -0.85	0.009	(5.89 - 9.11) [4.97, 9.93]
20:0 Arachidic (% Total FA)	0.29 (0.0035) [0.29 - 0.29]	0.32 (0.0035) [0.31 - 0.32]	-0.026 (0.0021) [-0.029 - -0.022]	-0.035, -0.017	0.006	(0.28 - 0.54) [0.22, 0.53]

Table 10. Statistical Summary of Site SFR Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

Component (Units) ¹	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Fatty Acid (% Total FA)						
20:1 Eicosenoic (% Total FA)	0.33 (0.0077) [0.32 - 0.35]	0.18 (0.0077) [0.17 - 0.19]	0.15 (0.011) [0.13 - 0.17]	0.10, 0.19	0.005	(0.15 - 0.22) [0.13, 0.25]
22:0 Behenic (% Total FA)	0.29 (0.0025) [0.29 - 0.29]	0.30 (0.0025) [0.29 - 0.30]	-0.0071 (0.0033) [-0.012 - -0.0012]	-0.021, 0.0069	0.161	(0.29 - 0.46) [0.22, 0.47]
24:0 Lignoceric (% Total FA)	0.15 (0.0045) [0.14 - 0.16]	0.14 (0.0045) [0.13 - 0.14]	0.0090 (0.0039) [0.0013 - 0.014]	-0.0077, 0.026	0.145	(0.056 - 0.21) [0.030, 0.26]
Fiber						
Acid Detergent Fiber (% DW)	16.62 (0.28) [15.85 - 17.05]	17.78 (0.28) [17.64 - 18.02]	-1.17 (0.36) [-1.84 - -0.59]	-2.74, 0.40	0.085	(12.46 - 21.25) [12.71, 19.29]
Neutral Detergent Fiber (% DW)	17.75 (0.93) [15.62 - 19.68]	19.99 (0.93) [19.01 - 21.09]	-2.24 (1.01) [-4.24 - -1.06]	-6.57, 2.09	0.156	(12.25 - 20.89) [12.07, 21.51]
Proximate						
Ash (% DW)	6.05 (0.10) [5.84 - 6.32]	6.17 (0.10) [6.15 - 6.22]	-0.12 (0.14) [-0.38 - 0.16]	-0.73, 0.49	0.491	(5.64 - 6.82) [5.26, 7.17]

Table 10. Statistical Summary of Site SFR Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

	Difference (Test minus Control)				Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value
Component (Units)¹					
Proximate					
Carbohydrates (% DW)	42.56 (0.37) [41.73 - 43.52]	42.80 (0.37) [42.65 - 42.96]	-0.24 (0.47) [-1.08 - 0.57]	-2.28, 1.80	0.663 (32.79 - 42.29) [30.78, 45.86]
Moisture (% FW)	12.13 (0.11) [12.00 - 12.30]	12.47 (0.11) [12.30 - 12.70]	-0.33 (0.15) [-0.70 - -0.10]	-0.97, 0.31	0.154 (6.89 - 12.50) [5.51, 13.37]
Protein (% DW)	32.70 (0.60) [31.48 - 34.13]	31.15 (0.60) [30.71 - 31.81]	1.55 (0.52) [0.55 - 2.32]	-0.70, 3.81	0.097 (29.51 - 40.25) [26.12, 43.51]
Total Fat (% DW)	18.70 (0.50) [17.41 - 19.50]	19.88 (0.50) [19.38 - 20.32]	-1.18 (0.40) [-1.98 - -0.73]	-2.91, 0.56	0.099 (16.91 - 23.48) [15.35, 25.95]
Vitamin					
Vitamin E (mg/100g DW)	2.20 (0.22) [2.07 - 2.42]	2.91 (0.22) [2.58 - 3.49]	-0.72 (0.31) [-1.40 - -0.16]	-2.06, 0.63	0.148 (1.09 - 5.10) [0, 7.36]
Antinutrient					
Lectin (H.U./mg DW)	2.28 (0.63) [0.82 - 3.38]	2.46 (0.63) [1.92 - 3.41]	-0.18 (0.90) [-2.59 - 1.31]	-4.04, 3.67	0.855 (0.65 - 8.10) [0, 6.44]

Table 10. Statistical Summary of Site SFR Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Component (Units)¹						
Antinutrient						
Phytic Acid (% DW)	1.90 (0.072) [1.83 - 2.03]	1.88 (0.072) [1.72 - 1.97]	0.023 (0.076) [-0.13 - 0.11]	-0.30, 0.35	0.786	(1.42 - 2.27) [1.35, 2.35]
Raffinose (% DW)	0.68 (0.021) [0.62 - 0.71]	0.68 (0.021) [0.66 - 0.70]	-0.0041 (0.029) [-0.064 - 0.051]	-0.13, 0.12	0.901	(0.40 - 0.80) [0.27, 0.87]
Stachyose (% DW)	4.06 (0.24) [3.88 - 4.41]	4.10 (0.24) [3.50 - 4.43]	-0.038 (0.35) [-0.56 - 0.91]	-1.53, 1.45	0.922	(2.30 - 4.53) [1.96, 4.41]
Trypsin Inhibitor (TIU/mg DW)	40.79 (3.57) [33.98 - 47.66]	36.63 (3.57) [33.22 - 42.92]	4.16 (1.82) [0.76 - 6.98]	-3.67, 11.98	0.149	(23.11 - 60.42) [8.75, 63.43]
Isoflavone						
Daidzein (µg/g DW)	2481.08 (83.81) [2354.95 - 2565.56]	2406.95 (83.81) [2223.49 - 2565.86]	74.13 (58.64) [-43.14 - 134.06]	-178.17, 326.42	0.333	(320.54 - 3061.22) [0, 3328.03]
Genistein (µg/g DW)	1487.13 (52.05) [1433.45 - 1527.94]	1390.09 (52.05) [1254.28 - 1466.21]	97.04 (43.02) [33.79 - 179.17]	-88.04, 282.12	0.152	(433.41 - 2301.59) [0, 2727.33]

Table 10. Statistical Summary of Site SFR Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

Component (Units) ¹	Difference (Test minus Control)				Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value
Isoflavone					
Glycitein (µg/g DW)	174.86 (13.28) [152.79 - 196.59]	122.44 (13.28) [98.05 - 146.12]	52.42 (18.78) [6.67 - 98.54]	-28.36, 133.21	0.107 (21.67 - 354.30) [0, 376.03]

¹DW = dry weight; FW = fresh weight; FA = fatty acid; S.E. = standard error; CI = Confidence Interval.

²With 95% confidence, interval contains 99% of the values expressed in the population of commercial substances. Negative limits were set to zero.

Table 11. Statistical Summary of Combined Site Soybean Forage Fiber and Proximate Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525)

Component (Units) ¹	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Fiber and Proximate						
Acid Detergent Fiber (% DW)	30.18 (2.20) [20.04 - 42.14]	29.17 (2.23) [19.21 - 40.67]	1.01 (1.64) [-10.04 - 12.39]	-2.38, 4.39	0.543	(23.18 - 42.11) [18.29, 41.02]
Ash (% DW)	8.75 (0.22) [7.39 - 10.11]	8.18 (0.22) [7.21 - 9.32]	0.57 (0.23) [-0.68 - 1.79]	0.096, 1.05	0.020	(6.76 - 10.40) [6.78, 9.91]
Carbohydrates (% DW)	72.30 (1.20) [68.94 - 78.93]	73.43 (1.21) [67.88 - 78.99]	-1.13 (0.59) [-4.74 - 5.27]	-2.36, 0.097	0.069	(63.74 - 80.60) [64.45, 80.50]
Moisture (% FW)	72.93 (1.16) [70.20 - 81.10]	72.22 (1.16) [69.40 - 77.50]	0.70 (0.48) [-1.50 - 7.20]	-0.64, 2.04	0.218	(65.80 - 82.00) [62.26, 83.45]
Neutral Detergent Fiber (% DW)	35.79 (2.05) [26.12 - 46.30]	35.85 (2.06) [32.19 - 45.90]	-0.062 (2.14) [-7.01 - 8.75]	-6.00, 5.88	0.978	(24.70 - 46.55) [22.57, 46.52]
Protein (% DW)	14.04 (1.13) [9.25 - 18.10]	13.34 (1.13) [9.71 - 17.85]	0.70 (0.55) [-5.20 - 3.75]	-0.43, 1.84	0.213	(9.51 - 19.93) [7.38, 21.27]

Table 11. Statistical Summary of Combined Site Soybean Forage Fiber and Proximate Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525)

	Difference (Test minus Control)				
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value
Component (Units) ¹					
Fiber and Proximate					
Total Fat (% DW)	4.91 (0.42) [2.29 - 7.01]	5.14 (0.42) [3.36 - 7.19]	-0.23 (0.38) [-2.23 - 2.80]	-1.01, 0.55	0.549
					Commercial (Range) [99% Tolerance Interval ²] (1.19 - 8.22) [0, 9.74]

¹DW = dry weight; FW = fresh weight; S.E. = standard error; CI = Confidence Interval.

²With 95% confidence, interval contains 99% of the values expressed in the population of commercial substances. Negative limits were set to zero.

Table 12. Statistical Summary of Combined Site Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525)

Component (Units) ¹	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Amino Acid (% DW)						
Alanine (% DW)	1.59 (0.033) [1.49 - 1.70]	1.57 (0.033) [1.43 - 1.66]	0.025 (0.018) [-0.041 - 0.13]	-0.026, 0.075	0.243	(1.34 - 1.78) [1.25, 1.92]
Arginine (% DW)	2.78 (0.11) [2.43 - 3.16]	2.68 (0.11) [2.31 - 2.99]	0.10 (0.036) [-0.062 - 0.39]	0.0012, 0.20	0.048	(2.15 - 3.23) [1.81, 3.62]
Aspartic Acid (% DW)	4.08 (0.13) [3.67 - 4.49]	4.00 (0.13) [3.51 - 4.43]	0.075 (0.060) [-0.16 - 0.52]	-0.092, 0.24	0.279	(3.37 - 4.76) [3.02, 5.11]
Cystine (% DW)	0.61 (0.0075) [0.57 - 0.64]	0.59 (0.0076) [0.55 - 0.63]	0.022 (0.0075) [-0.027 - 0.073]	0.0010, 0.042	0.043	(0.53 - 0.64) [0.49, 0.69]
Glutamic Acid (% DW)	6.46 (0.24) [5.72 - 7.19]	6.32 (0.24) [5.42 - 7.09]	0.14 (0.12) [-0.32 - 1.02]	-0.19, 0.47	0.300	(5.14 - 7.73) [4.42, 8.48]
Glycine (% DW)	1.59 (0.039) [1.47 - 1.74]	1.56 (0.039) [1.41 - 1.67]	0.028 (0.022) [-0.050 - 0.17]	-0.033, 0.089	0.265	(1.30 - 1.79) [1.19, 1.95]

Table 12. Statistical Summary of Combined Site Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

Component (Units) ¹	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Amino Acid (% DW)						
Histidine (% DW)	0.96 (0.023) [0.88 - 1.04]	0.94 (0.023) [0.84 - 1.01]	0.027 (0.010) [-0.021 - 0.11]	-0.0029, 0.057	0.065	(0.79 - 1.07) [0.74, 1.16]
Isoleucine (% DW)	1.71 (0.050) [1.56 - 1.88]	1.67 (0.051) [1.45 - 1.86]	0.039 (0.036) [-0.15 - 0.26]	-0.064, 0.14	0.344	(1.37 - 2.00) [1.23, 2.15]
Leucine (% DW)	2.73 (0.083) [2.47 - 3.01]	2.69 (0.083) [2.37 - 2.94]	0.044 (0.040) [-0.13 - 0.32]	-0.065, 0.15	0.325	(2.26 - 3.14) [2.06, 3.41]
Lysine (% DW)	2.39 (0.053) [2.19 - 2.55]	2.33 (0.053) [2.10 - 2.51]	0.057 (0.025) [-0.051 - 0.25]	-0.011, 0.13	0.080	(2.00 - 2.63) [1.87, 2.81]
Methionine (% DW)	0.55 (0.0088) [0.51 - 0.58]	0.53 (0.0089) [0.49 - 0.57]	0.020 (0.011) [-0.035 - 0.056]	-0.010, 0.049	0.141	(0.46 - 0.59) [0.43, 0.63]
Phenylalanine (% DW)	1.82 (0.056) [1.64 - 2.00]	1.80 (0.056) [1.58 - 1.99]	0.019 (0.027) [-0.16 - 0.22]	-0.056, 0.093	0.523	(1.50 - 2.11) [1.35, 2.31]

Table 12. Statistical Summary of Combined Site Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

Component (Units) ¹	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Amino Acid (% DW)						
Proline (% DW)	1.77 (0.057) [1.59 - 1.95]	1.72 (0.057) [1.52 - 1.90]	0.054 (0.030) [-0.046 - 0.27]	-0.029, 0.14	0.145	(1.43 - 2.03) [1.29, 2.21]
Serine (% DW)	1.75 (0.059) [1.49 - 1.98]	1.77 (0.059) [1.45 - 1.94]	-0.016 (0.035) [-0.22 - 0.24]	-0.087, 0.056	0.655	(1.55 - 2.05) [1.44, 2.15]
Threonine (% DW)	1.33 (0.030) [1.20 - 1.45]	1.33 (0.030) [1.18 - 1.47]	-0.0031 (0.018) [-0.13 - 0.11]	-0.041, 0.035	0.867	(1.19 - 1.48) [1.12, 1.53]
Tryptophan (% DW)	0.42 (0.011) [0.37 - 0.46]	0.41 (0.012) [0.35 - 0.44]	0.0016 (0.0069) [-0.028 - 0.046]	-0.017, 0.020	0.831	(0.33 - 0.48) [0.30, 0.50]
Tyrosine (% DW)	1.25 (0.029) [1.17 - 1.33]	1.22 (0.029) [1.10 - 1.32]	0.026 (0.014) [-0.040 - 0.12]	-0.011, 0.064	0.124	(1.07 - 1.39) [0.99, 1.49]
Valine (% DW)	1.83 (0.052) [1.69 - 2.02]	1.77 (0.053) [1.55 - 1.96]	0.051 (0.038) [-0.17 - 0.28]	-0.059, 0.16	0.260	(1.45 - 2.13) [1.31, 2.29]

Table 12. Statistical Summary of Combined Site Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

Component (Units) ¹	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Fatty Acid (% Total FA)						
16:0 Palmitic (% Total FA)	2.36 (0.056) [2.25 - 2.44]	10.83 (0.056) [10.51 - 11.08]	-8.47 (0.055) [-8.68 - -8.13]	-8.62, -8.31	<0.001	(8.78 - 11.51) [7.62, 12.55]
18:0 Stearic (% Total FA)	3.31 (0.067) [3.07 - 3.82]	4.50 (0.067) [4.24 - 4.85]	-1.19 (0.065) [-1.47 - -0.79]	-1.37, -1.01	<0.001	(3.82 - 7.21) [2.87, 7.15]
18:1 Oleic (% Total FA)	76.47 (0.59) [73.13 - 79.17]	22.81 (0.59) [21.41 - 25.08]	53.65 (0.22) [51.71 - 55.05]	53.17, 54.13	<0.001	(20.77 - 27.19) [18.40, 30.22]
18:2 Linoleic (% Total FA)	10.10 (0.39) [7.85 - 12.42]	52.86 (0.39) [51.68 - 53.89]	-42.77 (0.18) [-43.74 - -41.38]	-43.17, -42.37	<0.001	(48.62 - 54.74) [47.75, 56.46]
18:3 Linolenic (% Total FA)	6.69 (0.28) [5.55 - 7.81]	8.02 (0.28) [6.86 - 8.60]	-1.33 (0.072) [-1.80 - -0.59]	-1.53, -1.13	<0.001	(5.89 - 9.11) [4.97, 9.93]
20:0 Arachidic (% Total FA)	0.30 (0.0076) [0.28 - 0.36]	0.34 (0.0077) [0.31 - 0.36]	-0.039 (0.0071) [-0.082 - -0.022]	-0.059, -0.019	0.005	(0.28 - 0.54) [0.22, 0.53]

Table 12. Statistical Summary of Combined Site Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

Component (Units) ¹	Difference (Test minus Control)				Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value
Fatty Acid (% Total FA)					
20:1 Eicosenoic (% Total FA)	0.34 (0.013) [0.27 - 0.40]	0.19 (0.013) [0.15 - 0.21]	0.15 (0.0086) [0.12 - 0.20]	0.13, 0.18	<0.001 (0.15 - 0.22) [0.13, 0.25]
22:0 Behenic (% Total FA)	0.29 (0.0037) [0.28 - 0.33]	0.30 (0.0038) [0.28 - 0.31]	-0.0052 (0.0051) [-0.029 - 0.020]	-0.017, 0.0070	0.346 (0.29 - 0.46) [0.22, 0.47]
24:0 Lignoceric (% Total FA)	0.14 (0.017) [0.066 - 0.17]	0.13 (0.017) [0.067 - 0.16]	0.0046 (0.0046) [-0.019 - 0.027]	-0.0084, 0.018	0.372 (0.056 - 0.21) [0.030, 0.26]
Fiber					
Acid Detergent Fiber (% DW)	17.14 (0.54) [15.71 - 19.31]	16.14 (0.54) [13.36 - 18.02]	1.00 (0.74) [-1.84 - 4.03]	-1.06, 3.05	0.249 (12.46 - 21.25) [12.71, 19.29]
Neutral Detergent Fiber (% DW)	18.44 (0.85) [13.41 - 22.18]	17.83 (0.86) [14.61 - 21.09]	0.60 (1.03) [-4.24 - 4.33]	-2.25, 3.46	0.590 (12.25 - 20.89) [12.07, 21.51]
Proximate					
Ash (% DW)	6.06 (0.13) [5.46 - 6.54]	6.13 (0.13) [5.48 - 6.55]	-0.072 (0.081) [-0.56 - 0.26]	-0.30, 0.15	0.421 (5.64 - 6.82) [5.26, 7.17]

Table 12. Statistical Summary of Combined Site Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Component (Units)¹						
Proximate						
Carbohydrates (% DW)	40.35 (0.86) [36.69 - 43.52]	39.93 (0.86) [37.46 - 42.96]	0.42 (0.37) [-1.08 - 2.00]	-0.59, 1.43	0.317	(32.79 - 42.29) [30.78, 45.86]
Moisture (% FW)	10.76 (0.37) [8.96 - 12.30]	11.56 (0.37) [10.20 - 12.70]	-0.80 (0.44) [-3.40 - 0.90]	-2.02, 0.42	0.141	(6.89 - 12.50) [5.51, 13.37]
Protein (% DW)	35.32 (0.99) [31.48 - 38.59]	34.66 (0.99) [30.71 - 37.40]	0.66 (0.36) [-0.94 - 3.08]	-0.33, 1.65	0.141	(29.51 - 40.25) [26.12, 43.51]
Total Fat (% DW)	18.29 (0.39) [16.55 - 19.50]	19.33 (0.39) [17.63 - 20.32]	-1.04 (0.16) [-2.16 - -0.20]	-1.39, -0.69	<0.001	(16.91 - 23.48) [15.35, 25.95]
Vitamin						
Vitamin E (mg/100g DW)	2.83 (0.43) [1.23 - 4.36]	3.27 (0.43) [1.69 - 4.19]	-0.44 (0.17) [-1.40 - 0.76]	-0.92, 0.037	0.062	(1.09 - 5.10) [0, 7.36]
Antinutrient						
Lectin (H.U./mg DW)	2.21 (0.40) [0.72 - 3.77]	2.45 (0.41) [0.61 - 5.53]	-0.24 (0.57) [-4.80 - 3.04]	-1.57, 1.09	0.686	(0.65 - 8.10) [0, 6.44]

Table 12. Statistical Summary of Combined Site Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

	Difference (Test minus Control)					Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value	
Component (Units)¹						
Antinutrient						
Phytic Acid (% DW)	1.82 (0.052) [1.52 - 2.13]	1.85 (0.053) [1.63 - 2.19]	-0.031 (0.041) [-0.27 - 0.18]	-0.12, 0.057	0.457	(1.42 - 2.27) [1.35, 2.35]
Raffinose (% DW)	0.58 (0.029) [0.48 - 0.71]	0.58 (0.029) [0.50 - 0.70]	0.00036 (0.015) [-0.088 - 0.12]	-0.042, 0.043	0.981	(0.40 - 0.80) [0.27, 0.87]
Stachyose (% DW)	3.87 (0.13) [3.39 - 4.48]	3.70 (0.13) [3.04 - 4.43]	0.17 (0.14) [-0.56 - 0.96]	-0.22, 0.56	0.290	(2.30 - 4.53) [1.96, 4.41]
Trypsin Inhibitor (TIU/mg DW)	38.14 (2.60) [26.73 - 52.01]	37.25 (2.61) [27.23 - 49.78]	0.89 (0.97) [-5.31 - 6.98]	-1.74, 3.51	0.408	(23.11 - 60.42) [8.75, 63.43]
Isoflavone						
Daidzein (µg/g DW)	1806.33 (229.35) [1145.72 - 2565.56]	1794.07 (229.50) [1092.43 - 2565.86]	12.26 (37.50) [-196.53 - 242.28]	-68.88, 93.40	0.748	(320.54 - 3061.22) [0, 3328.03]
Genistein (µg/g DW)	1160.30 (115.82) [809.79 - 1527.94]	1117.27 (115.95) [751.67 - 1466.21]	43.04 (24.92) [-104.61 - 208.66]	-10.74, 96.81	0.107	(433.41 - 2301.59) [0, 2727.33]

Table 12. Statistical Summary of Combined Site Soybean Seed Amino Acid, Fatty Acid, Fiber, Proximate, Vitamin, Antinutrient and Isoflavone Content for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) (cont.)

	Difference (Test minus Control)				Commercial (Range) [99% Tolerance Interval ²]
	MON 87705 Mean (S.E.) [Range]	Asgrow A3525 Mean (S.E.) [Range]	Mean (S.E.) [Range]	95% CI (Lower, Upper)	p-Value
Component (Units) ¹					
Isoflavone					
Glycitein (µg/g DW)	132.85 (12.38) [49.11 - 196.59]	126.86 (12.53) [72.10 - 167.04]	5.98 (12.18) [-61.67 - 98.54]	-27.41, 39.38	0.648 (21.67 - 354.30) [0, 376.03]

¹DW = dry weight; FW = fresh weight; FA = fatty acid; S.E. = standard error; CI = Confidence Interval.

²With 95% confidence, interval contains 99% of the values expressed in the population of commercial substances. Negative limits were set to zero.

Table 13. Summary of Differences (p<0.05) for the Comparison of Soybean Component Levels for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) and Commercial Reference Substances

Component (Units) ¹	Mean Difference (Test minus Control)				Significance (p-Value)	Test Range	Commercial Tolerance Interval ²
	MON 87705 Mean	Asgrow A3525 Mean	(% of Asgrow A3525)	Difference Mean			
Statistical Differences Observed in Combined-Site Analysis							
Forage Fiber and Proximate							
Ash (% DW)	8.75	8.18	6.99	0.020	[7.39 - 10.11]	[6.78, 9.91]	
Seed Amino Acid (% DW)							
Arginine (% DW)	2.78	2.68	3.74	0.048	[2.43 - 3.16]	[1.81, 3.62]	
Cystine (% DW)	0.61	0.59	3.66	0.043	[0.57 - 0.64]	[0.49, 0.69]	
Seed Fatty Acid (% Total FA)							
16:0 Palmitic (% Total FA)	2.36	10.83	-78.18	<0.001	[2.25 - 2.44]	[7.62, 12.55]	
18:0 Stearic (% Total FA)	3.31	4.50	-26.39	<0.001	[3.07 - 3.82]	[2.87, 7.15]	
18:1 Oleic (% Total FA)	76.47	22.81	235.20	<0.001	[73.13 - 79.17]	[18.40, 30.22]	
18:2 Linoleic (% Total FA)	10.10	52.86	-80.90	<0.001	[7.85 - 12.42]	[47.75, 56.46]	

Table 13. Summary of Differences (p<0.05) for the Comparison of Soybean Component Levels for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) and Commercial Reference Substances (cont.)

Component (Units) ¹	Mean Difference (Test minus Control)				Significance (p-Value)	Test Range	Commercial Tolerance Interval ²
	MON 87705 Mean	Asgrow A3525 Mean	(% of Asgrow A3525)	Mean Difference			
Statistical Differences Observed in Combined-Site Analysis							
Seed Fatty Acid (% Total FA)							
18:3 Linolenic (% Total FA)	6.69	8.02	-16.59	<0.001	[5.55 - 7.81]	[4.97, 9.93]	
20:0 Arachidic (% Total FA)	0.30	0.34	-11.72	0.005	[0.28 - 0.36]	[0.22, 0.53]	
20:1 Eicosenoic (% Total FA)	0.34	0.19	79.85	<0.001	[0.27 - 0.40]	[0.13, 0.25]	
Seed Proximate							
Total Fat (% DW)	18.29	19.33	-5.38	<0.001	[16.55 - 19.50]	[15.35, 25.95]	
Statistical Differences Observed in More than One Individual Site							
Seed Fatty Acid (% Total FA)							
16:0 Palmitic (% Total FA) Site CdT	2.31	10.80	-78.62	<0.001	[2.29 - 2.32]	[7.62, 12.55]	
16:0 Palmitic (% Total FA) Site MEL	2.39	10.83	-77.92	<0.001	[2.35 - 2.42]		
16:0 Palmitic (% Total FA) Site QUI	2.30	10.56	-78.24	0.005	[2.25 - 2.37]		

Table 13. Summary of Differences (p<0.05) for the Comparison of Soybean Component Levels for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) and Commercial Reference Substances (cont.)

Component (Units) ¹	Mean Difference (Test minus Control)			Significance (p-Value)	Test Range	Commercial Tolerance Interval ²
	MON 87705 Mean	Asgrow A3525 Mean	Difference (% of Asgrow A3525)			
Statistical Differences Observed in More than One Individual Site						
Seed Fatty Acid (% Total FA)						
16:0 Palmitic (% Total FA) Site RAN	2.40	10.96	-78.12	<0.001	[2.39 - 2.40]	[7.62, 12.55]
16:0 Palmitic (% Total FA) Site SFR	2.42	11.00	-78.00	<0.001	[2.40 - 2.44]	
18:0 Stearic (% Total FA) Site CdT	3.17	4.58	-30.88	<0.001	[3.09 - 3.23]	[2.87, 7.15]
18:0 Stearic (% Total FA) Site MEL	3.33	4.39	-24.06	0.018	[3.20 - 3.47]	
18:0 Stearic (% Total FA) Site QUI	3.51	4.82	-27.20	0.004	[3.15 - 3.82]	
18:0 Stearic (% Total FA) Site RAN	3.34	4.50	-25.73	0.001	[3.28 - 3.41]	
18:0 Stearic (% Total FA) Site SFR	3.22	4.31	-25.26	0.001	[3.07 - 3.41]	

Table 13. Summary of Differences (p<0.05) for the Comparison of Soybean Component Levels for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) and Commercial Reference Substances (cont.)

Component (Units) ¹	Mean Difference (Test minus Control)					Test Range	Commercial Tolerance Interval ²
	Mean Difference			Significance (p-Value)			
	MON 87705 Mean	Asgrow A3525 Mean	(% of Asgrow A3525)				
Statistical Differences Observed in More than One Individual Site							
Seed Fatty Acid (% Total FA)							
18:1 Oleic (% Total FA) Site CdT	76.44	23.02	232.08	<0.001	[76.35 - 76.60]	[18.40, 30.22]	
18:1 Oleic (% Total FA) Site MEL	76.10	22.31	241.09	<0.001	[75.68 - 76.33]		
18:1 Oleic (% Total FA) Site QUI	78.61	24.95	215.05	0.003	[77.70 - 79.17]		
18:1 Oleic (% Total FA) Site RAN	74.69	21.53	246.87	<0.001	[73.13 - 75.98]		
18:1 Oleic (% Total FA) Site SFR	76.49	22.42	241.12	<0.001	[75.33 - 77.21]		
18:2 Linoleic (% Total FA) Site CdT	10.09	52.43	-80.75	<0.001	[9.94 - 10.22]	[47.75, 56.46]	
18:2 Linoleic (% Total FA) Site MEL	10.50	53.48	-80.38	<0.001	[10.16 - 10.92]		

Table 13. Summary of Differences (p<0.05) for the Comparison of Soybean Component Levels for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) and Commercial Reference Substances (cont.)

Component (Units) ¹	Mean Difference (Test minus Control)				Significance (p-Value)	Test Range	Commercial Tolerance Interval ²
	Mean		Difference				
	MON 87705 Mean	Asgrow A3525 Mean	(% of Asgrow A3525)				
Statistical Differences Observed in More than One Individual Site							
Seed Fatty Acid (% Total FA)							
18:2 Linoleic (% Total FA) Site QUI	8.75	51.70	-83.07	0.006	[7.85 - 10.02]	[47.75, 56.46]	
18:2 Linoleic (% Total FA) Site RAN	11.32	53.73	-78.92	<0.001	[10.37 - 12.42]		
18:2 Linoleic (% Total FA) Site SFR	9.82	52.84	-81.42	<0.001	[9.33 - 10.55]		
18:3 Linolenic (% Total FA) Site CdT	6.90	8.15	-15.32	0.001	[6.85 - 6.94]	[4.97, 9.93]	
18:3 Linolenic (% Total FA) Site MEL	6.58	8.00	-17.72	0.002	[6.53 - 6.65]		
18:3 Linolenic (% Total FA) Site QUI	5.64	7.02	-19.69	0.029	[5.55 - 5.71]		
18:3 Linolenic (% Total FA) Site SFR	6.98	8.49	-17.72	0.009	[6.79 - 7.26]		

Table 13. Summary of Differences (p<0.05) for the Comparison of Soybean Component Levels for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) and Commercial Reference Substances (cont.)

Component (Units) ¹	Mean Difference (Test minus Control)				Significance (p-Value)	Test Range	Commercial Tolerance Interval ²
	Mean		Difference				
	MON 87705 Mean	Asgrow A3525 Mean	(% of Asgrow A3525)				
Statistical Differences Observed in More than One Individual Site							
Seed Fatty Acid (% Total FA)							
20:0 Arachidic (% Total FA) Site CdT	0.29	0.35	-18.10	0.016	[0.28 - 0.29]	[0.22, 0.53]	
20:0 Arachidic (% Total FA) Site MEL	0.30	0.34	-11.86	0.026	[0.29 - 0.30]		
20:0 Arachidic (% Total FA) Site QUI	0.33	0.36	-8.84	0.041	[0.30 - 0.36]		
20:0 Arachidic (% Total FA) Site RAN	0.28	0.33	-13.08	0.014	[0.28 - 0.29]		
20:0 Arachidic (% Total FA) Site SFR	0.29	0.32	-8.18	0.006	[0.29 - 0.29]		
20:1 Eicosenoic (% Total FA) Site CdT	0.36	0.21	76.81	<0.001	[0.36 - 0.38]	[0.13, 0.25]	
20:1 Eicosenoic (% Total FA) Site MEL	0.35	0.20	70.85	0.001	[0.34 - 0.36]		

Table 13. Summary of Differences (p<0.05) for the Comparison of Soybean Component Levels for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) and Commercial Reference Substances (cont.)

Component (Units) ¹	Mean Difference (Test minus Control)				Significance (p-Value)	Test Range	Commercial Tolerance Interval ²
	MON 87705 Mean	Asgrow A3525 Mean	(% of Asgrow A3525)	Mean Difference			
Statistical Differences Observed in More than One Individual Site							
Seed Fatty Acid (% Total FA)							
20:1 Eicosenoic (% Total FA) Site QUI	0.38	0.20	89.53	0.049		[0.37 - 0.40]	[0.13, 0.25]
20:1 Eicosenoic (% Total FA) Site RAN	0.29	0.16	82.18	0.003		[0.27 - 0.31]	
20:1 Eicosenoic (% Total FA) Site SFR	0.33	0.18	80.72	0.005		[0.32 - 0.35]	
Seed Fiber							
Acid Detergent Fiber (% DW) Site CdT	18.23	16.27	12.10	0.049		[17.57 - 18.58]	[12.71, 19.29]
Acid Detergent Fiber (% DW) Site RAN	16.32	13.94	17.07	0.002		[15.71 - 16.78]	
Statistical Differences Observed in One Site							
Forage Fiber and Proximate							
Carbohydrates (% DW) Site RAN	69.77	72.09	-3.22	0.027		[68.94 - 71.06]	[64.45, 80.50]
Total Fat (% DW) Site MEL	5.79	6.76	-14.29	0.030		[5.37 - 6.57]	[0, 9.74]

Table 13. Summary of Differences (p<0.05) for the Comparison of Soybean Component Levels for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) and Commercial Reference Substances (cont.)

Component (Units) ¹	Mean Difference (Test minus Control)			Significance (p-Value)	Test Range	Commercial Tolerance Interval ²
	MON 87705 Mean	Asgrow A3525 Mean	Difference (% of Asgrow A3525)			
Statistical Differences Observed in One Site						
Seed Amino Acid (% DW)						
Alanine (% DW) Site SFR	1.51	1.44	4.62	0.024	[1.49 - 1.54]	[1.25, 1.92]
Arginine (% DW) Site SFR	2.52	2.34	7.56	0.047	[2.43 - 2.64]	[1.81, 3.62]
Aspartic Acid (% DW) Site SFR	3.76	3.56	5.48	0.009	[3.67 - 3.88]	[3.02, 5.11]
Glutamic Acid (% DW) Site SFR	5.90	5.53	6.62	0.008	[5.72 - 6.12]	[4.42, 8.48]
Histidine (% DW) Site SFR	0.90	0.85	5.90	0.018	[0.88 - 0.94]	[0.74, 1.16]
Leucine (% DW) Site SFR	2.54	2.41	5.12	0.014	[2.47 - 2.61]	[2.06, 3.41]
Lysine (% DW) Site SFR	2.25	2.13	5.32	0.007	[2.19 - 2.30]	[1.87, 2.81]

Table 13. Summary of Differences (p<0.05) for the Comparison of Soybean Component Levels for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) and Commercial Reference Substances (cont.)

Component (Units) ¹	Mean Difference (Test minus Control)				Significance (p-Value)	Test Range	Commercial Tolerance Interval ²
	MON 87705 Mean	Asgrow A3525 Mean	Difference (% of Asgrow A3525)	Mean			
Statistical Differences Observed in One Site							
Seed Amino Acid (% DW)							
Phenylalanine (% DW) Site SFR	1.68	1.60	4.83	0.019	[1.64 - 1.73]	[1.35, 2.31]	
Proline (% DW) Site SFR	1.62	1.55	5.02	0.021	[1.59 - 1.66]	[1.29, 2.21]	
Tyrosine (% DW) Site SFR	1.18	1.12	5.72	0.042	[1.17 - 1.20]	[0.99, 1.49]	
Seed Fatty Acid (% Total FA)							
24:0 Lignoceric (% Total FA) Site CdT	0.15	0.15	-3.24	0.008	[0.14 - 0.15]	[0.030, 0.26]	
Seed Fiber							
Neutral Detergent Fiber (% DW) Site CdT	21.04	17.99	16.97	0.009	[20.47 - 22.18]	[12.07, 21.51]	
Seed Proximate							
Carbohydrates (% DW) Site CdT	41.82	40.05	4.40	0.016	[41.62 - 42.00]	[30.78, 45.86]	
Seed Vitamin							
Vitamin E (mg/100g DW) Site MEL	3.26	3.83	-15.05	0.005	[3.15 - 3.45]	[0, 7.36]	

Table 13. Summary of Differences (p<0.05) for the Comparison of Soybean Component Levels for Test (MON 87705) vs. the Conventional Control (Asgrow A3525) and Commercial Reference Substances (cont.)

Component (Units) ¹	Mean Difference (Test minus Control)				Test Range	Commercial Tolerance Interval ²
	MON 87705 Mean	Asgrow A3525 Mean	(% of Asgrow A3525)	Significance (p-Value)		
Statistical Differences Observed in One Site						
Seed Antinutrient						
Stachyose (% DW) Site CdT	3.76	3.10	21.27	0.046	[3.55 - 4.16]	[1.96, 4.41]

¹DW = dry weight; FW = fresh weight; FA = fatty acid.

²With 95% confidence, interval contains 99% of the values expressed in the population of commercial substances. Negative limits were set to zero.

**Listing 1. Components Excluded from Summary and Analysis Due to Excessive Observations
Below the Assay's Limit of Quantitation**

Tissue	Category	Component	(N) Below LOQ	(N) Total	(%)
Seed	Fatty Acid	10:0 Capric	86	86	100.0
		12:0 Lauric	86	86	100.0
		14:0 Myristic	86	86	100.0
		14:1 Myristoleic	86	86	100.0
		15:0 Pentadecylic	86	86	100.0
		15:1 10c Pentadecenoic	86	86	100.0
		16:1 Palmitoleic	85	86	98.8
		17:0 Heptadecanoic	79	86	91.9
		17:1 9c Heptadecenoic	77	86	89.5
		18:1 9t Octadecenoic	86	86	100.0
		18:2 6c,9c Octadecadienoic	85	86	98.8
		18:2 9c,15c Octadecadienoic	79	86	91.9
		18:3 Gamma Linolenic	86	86	100.0

**Listing 1. Components Excluded from Summary and Analysis Due to Excessive Observations
Below the Assay's Limit of Quantitation**

Tissue	Category	Component	(N) Below LOQ	(N) Total	(%)
		20:2 11c, 14c Eicosadienoic	86	86	100.0
		20:3 11c, 14c, 17c Eicosatrienoic	86	86	100.0
		20:4 Arachidonic	86	86	100.0
		8:0 Caprylic	86	86	100.0

Listing 2. Components with Observations Below the Assay's Limit of Quantitation Not Excluded from Summaries and Analysis

Tissue	Category	Component	Material	Site	Rep	Original Value	Value Assigned
Seed	Fatty Acid	24:0 Lignoceric	Asgrow A3525	RAN	1	< 0.0200	0.010
				RAN	2	< 0.0200	0.010
				RAN	3	< 0.0200	0.010
			Asgrow A4324	RAN	1	< 0.0200	0.010
				RAN	3	< 0.0200	0.010
			Hoegemeyer 333 SFR		3	< 0.0200	0.010
			Lewis 391	RAN	3	< 0.0200	0.010
		MON 87705		RAN	1	< 0.0200	0.010
				RAN	2	< 0.0200	0.010
				RAN	3	< 0.0200	0.010
		Stine 3870-0		RAN	1	< 0.0200	0.010
				RAN	2	< 0.0200	0.010
				RAN	3	< 0.0200	0.010