Report Title

Assessment of Cry1A.105, Cry2Ab2, Cry3Bb1, and CP4 EPSPS Protein Levels in the Combined Trait Corn Product MON 89034 × TC1507 × MON 88017 × DAS-59122-7 Produced in U.S. Field Trials During 2006

This report reflects data developed and reported in study #06-01-52-18.

Report Authors

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Study Completed On

November 30, 2007

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Sponsor and Performing Laboratory

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Report ID

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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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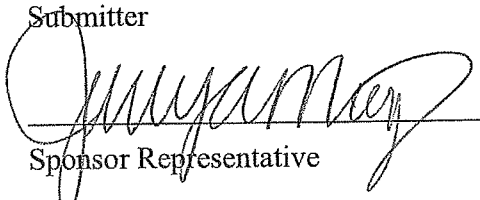
This document describes the assessment of the Cry1A.105, Cry2Ab2, Cry3Bb1, and CP4 EPSPS protein levels in the combined trait corn product MON 89034 × TC1507 × MON 88017 × DAS-59122-7, as well as a control and reference substances generated under Monsanto study #06-01-52-18.

The Statement of Compliance from study #06-01-52-18 is provided below.

Statement of Compliance

This study meets the US EPA Good Laboratory Practice requirements as specified in 40 CFR Part 160.

Submitter — Date



11/29/07

Sponsor Representative — Date

Lori Stillwell — 11/30/07

Study Director — Date

Quality Assurance Statement

Following is a list of reviews conducted by the Monsanto Regulatory Quality Assurance Unit on study 06-01-52-18.

Reviews conducted by the Quality Assurance Unit confirm that the final report for study 06-01-52-18 accurately describes the methods and standard operating procedures followed and accurately reflects the raw data of the study.

Dates of Inspection/Audit	Phase	Date Reported to Study Director	Date Reported to Management
04/16/2007	ELISA	04/27/2007	04/27/2007
04/25/2007	Moisture Analysis	05/09/2007	05/09/2007
05/22/2007	ELISA	06/04/2007	06/04/2007
05/25/2007	Raw Data Audit	06/08/2007	06/08/2007
06/11/2007	Raw Data Audit	06/13/2007	06/13/2007
07/02/2007	Raw Data Audit	07/10/2007	07/10/2007
07/13/2007	Raw Data Audit	08/01/2007	08/01/2007
07/13/2007	Raw Data Audit	08/15/2007	08/15/2007
09/12/2007	Draft Report Review	10/30/2007	10/30/2007

Additionally, the Quality Assurance Unit reviewed this report, MSL0021070, and confirmed that this report accurately reflects the portions of the final report for study 06-01-52-18 that are reported in MSL0021070.

Dates of Inspection/Audit	Phase	Date Reported to Study Director	Date Reported to Management
10/25/2007	Draft Report Review MSL0021070	11/26/2007	11/26/2007

Mary Stephenson 11/29/07

Quality Assurance Unit
Monsanto Regulatory, Monsanto Company

Date

Report Certification

This report is an accurate and complete representation of a portion of the work conducted in study #06-01-52-18.

Signatures of Approval:

Lori Stillwell 11/30/07

Lori Stillwell
Report Author

Date

Nov 29, 2007

Andre Silvanovich
Team Lead

Date

Study Information

Study Number:	06-01-52-18
Report Number:	MSL0021070
Report Title:	Assessment of Cry1A.105, Cry2Ab2, Cry3Bb1, and CP4 EPSPS Protein Levels in the Combined Trait Corn Product MON 89034 × TC1507 × MON 88017 × DAS-59122-7 Produced in U.S. Field Trials During 2006
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Abbreviations and Definitions

ANOVA	analysis of variance
BSA	bovine serum albumin
Bt	*Bacillus thuringiensis*
CP4 EPSPS	5-enolpyruvylshikimate-3-phosphate synthase derived from *Agrobacterium sp.* strain CP4
CRW	corn rootworm
Cry1A.105	A modified *Bt* Cry1A protein with 93.6% overall amino acid sequence identity to Cry1Ac
Cry1F	A modified *Bt* Cry protein (*var aizawai*)
Cry2Ab2	A protein from *Bt* subsp. *kurstaki*
Cry3Bb1	A variant of the wild-type Cry3Bb1 protein from *Bt* subsp. *kumamotoensis* that has >99% amino acid identity to the wild-type protein
Cry34Ab1	A Cry protein from *Bt* strain PS149B1
Cry35Ab1	A Cry protein from *Bt* strain PS149B1
CV	coefficient of variation
DCA	deoxycholic acid
DTT	dithiothreitol
DWCF	dry weight conversion factor
dwt.	dry weight of tissue
E. coli	*Escherichia coli*
ELISA	enzyme-linked immunosorbent assay
EPA	Environmental Protection Agency
FIFRA	Federal Insecticide, Fungicide and Rodenticide Act
fwt.	fresh weight of tissue
HRP	horseradish peroxidase
IgG	immunoglobulin G
LOD	limit of detection
LOQ	limit of quantitation
NFDM	non-fat dried milk
NLS	N-lauroyl sarcosine
OSL	over season leaf
OSR	over season root
OSWP	over season whole plant
PAT	phosphinothricin acetyl transferase from *Streptomyces viridochromogenes*
PBS	phosphate-buffered saline
PBST	phosphate-buffered saline with Tween 20

Abbreviations and Definitions (continued[1])

PCR	polymerase chain reaction
QA	Quality Assurance
SEBA	soil extraction buffer with L-ascorbic acid
SD	standard deviation
SDS-PAGE	sodium dodecyl sulfate polyacrylamide gel electrophoresis
SOP	standard operating procedure
TBA	Tris-borate buffer with L-ascorbic acid
TMB	3,3',5,5'-tetramethylbenzidine
Tris	tris(hydroxymethyl)aminomethane
TSSP	tissue-specific site pool

[1] Standard abbreviations, e.g., units of measure, were used in this report according to format described in "Instructions to Authors" in the Journal of Biological Chemistry.

1.0 Summary

Monsanto Company and Agrigenetics (Dow AgroSciences) have used conventional breeding techniques to develop the combined trait corn product MON 89034 × TC1507 × MON 88017 × DAS-59122-7 that confers insect resistance and herbicide tolerance.

The purpose of this report is to disclose the levels of Cry1A.105, Cry2Ab2, Cry3Bb1, and CP4 EPSPS proteins determined by validated enzyme-linked immunosorbent assays (ELISA) in corn tissues collected from MON 89034 × TC1507 × MON 88017 × DAS-59122-7 produced in U.S. field trials. Tissue samples were collected from plants grown in the U.S. at five field sites in 2006 under Production Plan 06-01-52-04. Over season leaf (OSL 1-3), over season root (OSR 1-3), over season whole plant (OSWP 1-3), pollen, and grain were used for ELISA analysis. The over season samples (leaf, root and whole plant) were collected three times at different growth stages as follows: for leaf (1) V2-V4 stage, (2) V8-V10 stage, and (3) R1 stage; for root (1) V2-V4 stage, (2) V5-V6 stage, and (3) R1 stage; and for whole plant (1) V10-V12 stage, (2) (forage) R4-R5 stage, and (3) R6/maturity stage. All protein levels for all tissue types were calculated on a microgram (µg) per gram (g) fresh weight (fwt.) basis. Moisture content was then measured for all tissue types and all protein levels were converted and reported on a dry weight (dwt.) basis.

The mean Cry1A.105 protein levels in MON 89034 × TC1507 × MON 88017 × DAS-59122-7 across all sites were 4.3 µg/g dwt. in grain, 19 µg/g dwt. in forage (OSWP-2), 14 µg/g dwt. in pollen, 140 µg/g dwt. in OSL-1, and 73 µg/g dwt. in OSR-1. In tissues harvested throughout the growing season, mean Cry1A.105 protein levels in MON 89034 × TC1507 × MON 88017 × DAS-59122-7 across all sites ranged from 47-210 µg/g dwt. in leaf, 11-100 µg/g dwt. in root, and 3.8-86 µg/g dwt. in whole plant.

The mean Cry2Ab2 protein levels in MON 89034 × TC1507 × MON 88017 × DAS-59122-7 across all sites were 5.7 µg/g dwt. in grain, 29 µg/g dwt. in forage (OSWP-2), 0.81 µg/g dwt. in pollen, 220 µg/g dwt. in OSL-1, and 54 µg/g dwt. in OSR-1. In tissues harvested throughout the growing season, mean Cry2Ab2 protein levels in MON 89034 × TC1507 × MON 88017 × DAS-59122-7 across all sites ranged from 60-350 µg/g dwt. in leaf, 4.1-120 µg/g dwt. in root, and 4.5-80 µg/g dwt. in whole plant.

The mean Cry3Bb1 protein levels in MON 89034 × TC1507 × MON 88017 × DAS-59122-7 across all sites were 18 µg/g dwt. in grain, 48 µg/g dwt. in forage (OSWP-2), 15 µg/g dwt. in pollen, 310 µg/g dwt. in OSL-1, and 160 µg/g dwt. in OSR-1. In tissues harvested throughout the growing season, mean Cry3Bb1 protein levels in MON 89034 × TC1507 × MON 88017 × DAS-59122-7 across all sites ranged from 90-490 µg/g dwt. in leaf, 23-260 µg/g dwt. in root, and 8.9-220 µg/g dwt. in whole plant.

The mean CP4 EPSPS protein levels in MON 89034 × TC1507 × MON 88017 × DAS-59122-7 across all sites were 5.2 µg/g dwt. in grain, 42 µg/g dwt. in forage (OSWP-2), 310 µg/g dwt. in pollen, 190 µg/g dwt. in OSL-1, and 99 µg/g dwt. in OSR-1. In tissues harvested throughout the growing season, mean CP4 EPSPS protein levels in

MON 89034 × TC1507 × MON 88017 × DAS-59122-7 across all sites ranged from 80-270 µg/g dwt. in leaf, 25-140 µg/g dwt. in root, and 5.1-120 µg/g dwt. in whole plant.

Cry1A.105, Cry2Ab2, Cry3Bb1, and CP4 EPSPS protein levels in the combined trait product MON 89034 × TC1507 × MON 88017 × DAS-59122-7 are comparable to protein levels in the MON 89034 and MON 88017 positive control substances, as appropriate.

2.0 Introduction

2.1 Background

Monsanto Company and Agrigenetics (Dow AgroSciences) have used conventional breeding techniques to develop the combined trait corn product MON 89034 × TC1507 × MON 88017 × DAS-59122-7 that confers insect resistance and herbicide tolerance. Each biotechnology-derived trait contributes specific benefits to the final combined product as follows:

MON 89034 produces two insecticidal proteins that protect against feeding damage caused by European corn borer (*Ostrinia nubilalis*) and other lepidopteran insect pests. MON 89034 produces two *Bacillus thuringiensis* proteins, Cry2Ab2 (subsp. *kurstaki*) protein and Cry1A.105, a modified Cry1A *Bt* protein. The combination of the two insecticidal proteins provides enhanced insect control and offers an additional insect-resistance management tool.

TC1507 produces the *Bacillus thuringiensis var aizawai* Cry1F protein to selectively control larvae of the European corn borer (*Ostrinia nubilalis*) and other lepidopteran insect pests. In addition, TC1507 produces the phosphinothricin acetyl transferase (PAT) protein from *Streptomyces viridochromogenes*, to confer tolerance to glufosinate-ammonium, the active ingredient in Liberty® herbicide.

MON 88017 produces a modified *Bacillus thuringiensis* (subsp. *kumamotoensis*) Cry3Bb1 protein to protect against corn rootworm (CRW) larval feeding. In addition, MON 88017 is a Roundup Ready® corn that produces 5-enolpyruvylshikimate-3-phosphate synthase protein from *Agrobacterium sp.* strain CP4 (CP4 EPSPS), which confers tolerance to glyphosate, the active ingredient in Roundup® agricultural herbicides.

DAS-59122-7 produces the *Bacillus thuringiensis* strain PS149B1 Cry34Ab1 and Cry35Ab1 proteins to protect against coleopteran pests such as corn rootworm. In addition, DAS-59122-7 produces the phosphinothricin acetyl transferase protein from *Streptomyces viridochromogenes* (PAT), and confers tolerance to glufosinate-ammonium, the active ingredient in Liberty® herbicide.

The combined trait corn product MON 89034 × TC1507 × MON 88017 × DAS-59122-7 provides insect protection against lepidopteran and coleopteran insect

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pests and tolerance to the glyphosate and glufosinate-ammonium herbicide families in a single product generated through conventional breeding techniques.

Cry1A.105, Cry2Ab2, Cry3Bb1, and CP4 EPSPS protein levels were determined in corn plants produced at five U.S. field sites in 2006. Field sites were selected to represent geographical regions where corn is grown commercially. Corn was planted in a three replicate, randomized, complete block field design at each test site.

2.2 Purpose

The purpose of study #06-01-52-18 was to determine the levels of various proteins of interest in corn tissues collected from single trait corn products and combined trait corn products which included MON 89034 × TC1507 × MON 88017 × DAS-59122-7. Tissue samples were collected from plants grown in the U.S. at five field sites in 2006 under Production Plan 06-01-52-04.

The purpose of this report is to assess the levels of Cry1A.105, Cry2Ab2, Cry3Bb1, and CP4 EPSPS proteins in corn tissues collected from MON 89034 × TC1507 × MON 88017 × DAS-59122-7, as well as a control and reference substances.

3.0 Materials

3.1 Test, Control, and Reference Substances

3.1.1 Test Substance

The test substance was MON 89034 × TC1507 × MON 88017 × DAS-59122-7 grown in U.S. field trials during 2006. Tissue samples were collected as outlined in Production Plan 06-01-52-04 from plants grown from starting seed lot GLP-0604-17108-S.

3.1.2 Control Substances

The negative control substance was a conventional corn with a similar genetic background to the test plants grown in 2006 U.S. field trials. Tissue samples of the negative control substance were collected from plants grown from starting seed lot GLP-0604-17109-S. The positive control substances were MON 88017 and MON 89034 collected from plants grown from starting seed lot numbers GLP-0604-17100-S and GLP-0604-17104-S, respectively. Tissue samples were collected as outlined in Production Plan 06-01-52-04.

3.1.3 Characterization of Test and Control Substances

The identities of the test and control substances were confirmed by verifying the chain-of-custody documentation prior to analysis. To further confirm the identities of the test and control substances, event-specific polymerase chain reaction (PCR) analyses were conducted on seed and grain samples. The PCR analyses of the planted seed were archived by the Sponsor under the seed lot numbers described in sections 3.1.1 and 3.1.2. The identities of grain samples harvested from the field were verified by PCR and the verification of identity was referenced back to the starting seed lot numbers and archived in the Regulatory archives.

3.1.4 Reference Substances

Four *E. coli*-produced protein standards were used. Copies of the certificates of analysis were archived with the study data.

A Cry1A.105 protein standard (lot 20-100086) was used as the reference substance for the analysis of Cry1A.105 protein levels. The purity-corrected protein concentration of the standard was 1.0 mg/ml by amino acid composition analysis. The purity was 80% as determined by sodium dodecyl sulfate polyacrylamide gel electrophoresis (SDS-PAGE) and densitometric analysis.

A Cry2Ab2 protein standard (lot 20-100071) was used as the reference substance for the analysis of Cry2Ab2 protein levels. The purity-corrected protein concentration of the standard was 0.4 mg/ml by amino acid composition analysis. The purity was 87% as determined by SDS-PAGE and densitometric analysis.

A Cry3Bb1 protein standard (lot 20-100084) was used as the reference substance for the analysis of Cry3Bb1 protein levels. The purity-corrected protein concentration of the standard was 1.0 mg/ml by amino acid composition analysis. The purity was 86% as determined by SDS-PAGE and densitometric analysis.

A CP4 EPSPS protein standard (lot 20-100015) was used as the reference substance for analysis of CP4 EPSPS protein levels. The purity-corrected protein concentration of the standard was 3.7 mg/ml by amino acid composition analysis. The purity was 97% as determined by SDS-PAGE and densitometric analysis.

4.0 Methods

4.1 Generation of Plant Samples

4.1.1 Summary of Field Design

Production Plan 06-01-52-04 (Klug, 2006) was initiated during the 2006 planting season to generate test and control substances at various corn-growing locations in the U.S. The field sites were as follows: Jefferson County, IA (site code IA-1); Greene County, IA (site code IA-2); Stark County, IL (site code IL-1); Clinton County, IL (site code IL-2); and York County, NE (site code NE). These field sites were located within the major corn-growing regions of the U.S. and provided a variety of environmental conditions. At each site, three replicated plots of plants containing MON 89034 × TC1507 × MON 88017 × DAS-59122-7, a conventional control, and positive control substances MON 88017 and MON 89034, were planted using a randomized complete block field design. Over season leaf (OSL 1-3), over season root (OSR 1-3), over season whole plant (OSWP 1-3), pollen, and grain tissues were collected from each replicated plot at all field sites. The over season samples (leaf, root and whole plant) were collected three times at different growth stages as follows: for leaf (1) V2-V4 stage, (2) V8-V10 stage, and (3) R1 stage; for root (1) V2-V4 stage, (2) V5-V6 stage, and (3) R1 stage; and for whole plant (1) V10-V12 stage, (2) (forage) R4-R5 stage, and (3) R6/maturity stage. The identification of corn growth and development stages were based on the descriptions in "How a Corn Plant

Develops" (Ritchie et al., 1997). Throughout the field production, sample identity was maintained by using unique sample identifiers and proper chain-of-custody documentation. All tissue samples, except grain, were stored and shipped on dry ice to the Monsanto processing facility in Saint Louis, Missouri. Grain samples were stored and shipped at ambient temperature.

4.1.2 Samples not included in study #06-01-52-18

One OSWP-2 (forage) conventional control sample from site IA-2 was thawed when received by the Monsanto sample processing team. The sample was not processed and it was not included in study #06-01-52-18.

There was insufficient MON 88017 pollen from the IL-1 site to perform CP4 EPSPS analysis on one sample. This sample was not weighed and extracted; and it was not included in the analysis.

4.2 Tissue Processing and Protein Extraction Methods

4.2.1 Processing Method

All tissue samples produced at the field sites were shipped to Monsanto's processing facility. Processed tissue samples were stored in a -80°C freezer until shipped on dry ice to Monsanto's analytical facility. All processed tissue samples were stored in a -80°C freezer during the study.

4.2.2 Extraction Methods

The Cry1A.105, Cry2Ab2, Cry3Bb1, and CP4 EPSPS proteins were extracted from corn tissues as described in Monsanto standard operating procedures (SOPs) BR-ME-1027-01, BR-ME-1026-01, BR-ME-0884-03, and BR-ME-0197-06, respectively. Extraction parameters for each protein and tissue type are described in Appendices 2 through 5. All processed tissues were kept on dry ice during extract preparation. All tissues were extracted using a Harbil mixer. Insoluble material was removed from the extracts by using a Serum Filter System (Fisher Scientific, Pittsburgh, PA), or by centrifugation. The extracts were aliquoted and stored in a -80°C freezer until analysis.

4.3 ELISA Reagents and Methods

4.3.1 Cry1A.105 Antibodies

Goat polyclonal antibodies (lot 7509175) specific for the Cry1A.105 protein were purified using Protein-G Agarose affinity chromatography. The concentration of the purified IgG was determined to be 0.93 mg/ml by spectrophotometric methods. The purified antibody was stored in a phosphate buffered saline (1X PBS) buffer (pH 7.4) containing 0.001 M KH_2PO_4, 0.01 M $Na_2HPO_4 \cdot 7H_2O$, 0.137 M NaCl, and 0.0027 M KCl.

The purified Cry1A.105 antibodies were coupled with biotin (Sigma, St. Louis, MO) according to the manufacturer's instructions and assigned lot 7592754-A. The detection reagent was NeutrAvidin (Pierce, Rockford, IL) conjugated to horseradish peroxidase (HRP).

4.3.2 Cry2Ab2 Antibodies

Mouse monoclonal antibody (lot G-800601) specific for the Cry2Ab2 protein was purified using Protein-A Agarose affinity chromatography. The concentration of the purified IgG was determined to be 1.0 mg/ml by spectrophotometric methods. Production of the Cry2Ab2 monoclonal antibody was performed by Strategic Biosolutions (Newark, DE). The purified antibody was stored in a buffer (pH 7.2) containing 0.02 M $Na_2HPO_4 \cdot 7H_2O$ and 0.15 M NaCl with 0.05% NaN_3 added as a preservative.

Goat antibodies (lot 7381853) specific for Cry2Ab2 were purified using Protein-G Agarose affinity chromatography. The concentration of the purified IgG was determined to be 6.6 mg/ml by spectrophotometric methods. The purified antibody was stored in 1X PBS, pH 7.4, coupled with biotin (Sigma) according to the manufacturer's instructions, and assigned lot G-805014. The detection reagent was NeutrAvidin-HRP.

4.3.3 Cry3Bb1 Antibodies

Goat polyclonal antibodies (lot 7107417) specific for the Cry3Bb1 protein were purified using Protein-G Agarose affinity chromatography. The concentration of the purified IgG was determined to be 5.16 mg/ml by spectrophotometric methods. The purified antibody was stored in 1X PBS with 0.02% NaN_3 (w/v) added as a preservative.

The purified Cry3Bb1 antibodies were coupled with biotin (Sigma) according to the manufacturer's instructions and assigned lot 7631442. The detection reagent was NeutrAvidin-HRP.

4.3.4 CP4 EPSPS Antibodies

Mouse monoclonal antibody clone 39B6.1 (lot 7022111) specific for the CP4 EPSPS protein was purified from mouse ascites fluid by Strategic Biosolutions (Newark, DE) using Protein-A Sepharose affinity chromatography. The concentration of the purified IgG was determined to be 2.3 mg/ml by spectrophotometric methods. Production of the 39B6.1 monoclonal antibody was performed by TSD Bioservices, Inc. (Newark, DE). The purified antibody was stored in a buffer (pH 7.2) containing 0.02 M $Na_2HPO_4 \cdot 7H_2O$, 0.15 M NaCl, and 15 ppm ProClin 300 (Sigma).

The detection reagent was goat anti-CP4 EPSPS antibody (Sigma, catalog number P-5867) conjugated to HRP.

4.3.5 Cry1A.105 ELISA Method

The Cry1A.105 ELISA was performed manually according to the SOP BR-ME-1027-01. Goat anti-Cry1A.105 capture antibodies were diluted in coating buffer (15 mM Na_2CO_3, 35 mM $NaHCO_3$, and 150 mM NaCl, pH 9.6) and immobilized onto 96-well microtiter plates at 5.0 µg/ml followed by incubation in a 4°C refrigerator for $\geq$8 h. Prior to each step in the assay, plates were washed with 1X PBS containing 0.05% (v/v) Tween 20 (1X PBST). For grain tissue

only, plates were blocked with the addition of 100 to 150 µl per well of 1X PBST with 9% non-fat dried milk (NFDM) for 30 to 90 minutes at 37°C. Cry1A.105 protein standard or sample extract was added at 100 µl per well and incubated for 1 h at 37°C. The captured Cry1A.105 protein was detected by the addition of 100 µl per well of biotinylated goat anti-Cry1A.105 antibodies and NeutrAvidin-HRP (Pierce). Plates were developed by adding 100 µl per well of HRP substrate, 3,3',5,5'-tetramethyl-benzidine (TMB; Kirkegaard & Perry, Gaithersburg, MD). The enzymatic reaction was terminated by the addition of 100 µl per well of 6 M H_3PO_4. Quantitation of the Cry1A.105 protein was accomplished by interpolation from a Cry1A.105 protein standard curve that ranged from 0.438-14 ng/ml.

4.3.6 Cry2Ab2 ELISA Method

The Cry2Ab2 ELISA was performed manually according to the SOP BR-ME-1026-01. Mouse anti-Cry2Ab2 capture antibody was diluted in coating buffer (15 mM Na_2CO_3 and 35 mM $NaHCO_3$, pH 9.6) and immobilized onto 96-well microtiter plates at 5.0 µg/ml followed by incubation in a 4°C refrigerator for ≥8 h. Prior to each step in the assay, plates were washed with 1X PBST. Cry2Ab2 protein standard or sample extract was added at 100 µl per well and incubated for 1 h at 37°C. The captured Cry2Ab2 protein was detected by the addition of 100 µl per well of biotinylated goat anti-Cry2Ab2 antibodies and NeutrAvidin-HRP. Plates were developed by adding 100 µl per well of TMB. The enzymatic reaction was terminated by the addition of 100 µl per well of 6 M H_3PO_4. Quantitation of the Cry2Ab2 protein was accomplished by interpolation from a Cry2Ab2 protein standard curve that ranged from 0.219-7 ng/ml.

4.3.7 Cry3Bb1 ELISA Method

The Cry3Bb1 ELISA was performed either manually or by using an automated robotic workstation according to the SOP BR-ME-0884-03. Goat anti-Cry3Bb1 antibodies were diluted in coating buffer (15 mM Na_2CO_3 and 35 mM $NaHCO_3$, pH 9.6) and immobilized onto 96-well microtiter plates at a concentration of 5.0 µg/ml followed by incubation in a 4°C refrigerator for ≥12 h. Prior to each step in the assay, plates were washed with 1X PBST. Plates were blocked with the addition of 150 µl per well of 1X PBS with 0.25% (w/v) casein buffer and incubated for 1 h at 37°C. Cry3Bb1 protein standard or sample extract was added at 100 µl per well and incubated for 1 h at 37°C. The captured Cry3Bb1 protein was detected by the addition of 100 µl per well of biotinylated goat anti-Cry3Bb1 antibodies and NeutrAvidin-HRP. Plates were developed by adding 100 µl per well of TMB. The enzymatic reaction was terminated by the addition of 100 µl per well of 6 M H_3PO_4. Quantitation of the Cry3Bb1 protein was accomplished by interpolation from a Cry3Bb1 protein standard curve that ranged from 0.35-11.2 ng/ml.

4.3.8 CP4 EPSPS ELISA Method

The CP4 EPSPS ELISA was performed either manually or by using an automated robotic workstation according to the SOP BR-ME-0197-06. Mouse

anti-CP4 EPSPS antibody was diluted in coating buffer (15 mM Na_2CO_3, 35 mM $NaHCO_3$, and 150 mM NaCl, pH 9.6) to a final concentration of 1.0 µg/ml, and immobilized onto 96-well microtiter plates followed by incubation in a 4°C refrigerator for ≥8h. Prior to each step in the assay, plates were washed with 1X PBST. CP4 EPSPS protein standard or sample extract was added at 100 µl per well and incubated for 1 h at 37°C. The captured CP4 EPSPS protein was detected by the addition of 100 µl per well of anti-CP4 EPSPS peroxidase conjugate. Plates were developed by adding 100 µl per well of TMB. The enzymatic reaction was terminated by the addition of 100 µl per well of 6 M H_3PO_4. Quantitation of the CP4 EPSPS protein was accomplished by interpolation from a CP4 EPSPS protein standard curve that ranged from 0.456-14.6 ng/ml.

4.3.9 Cry1A.105, Cry2Ab2, Cry3Bb1, and CP4 EPSPS ELISA Validations

Appendices 2 - 5 summarize the results of validation of the ELISAs used to assess the Cry1A.105, Cry2Ab2, Cry3Bb1, and CP4 EPSPS protein levels in corn tissues, respectively.

4.4 Control of Bias

The test and control substances were planted in a non-systematic manner at all field sites using a randomized complete block design as described in Production Plan 06-01-52-04. Representative tissues from each plot were collected as described in the production plan. All tissues, except pollen, were processed by thoroughly grinding before extraction to minimize sampling bias. All of the ELISA methods used were optimized to minimize method bias.

4.5 Moisture Analysis

Tissues were analyzed for moisture content using an IR-200 Moisture Analyzer (Denver Instrument Company, Arvada, CO) according to SOP AG-EQ-1023-01. A homogeneous tissue-specific site pool (TSSP) was prepared consisting of samples of a given tissue type grown at a given site. These pools were prepared for all tissues in study #06-01-52-18. The average percent moisture for each TSSP was calculated from triplicate analyses. A TSSP Dry Weight Conversion Factor (DWCF) was calculated as follows:

$$DWCF = 1 - \frac{(Mean\ TSSP\ \%\ Moisture)}{(100)}$$

The DWCFs were used to convert protein levels assessed on a µg/g fresh weight (fwt.) basis into levels reported on a µg/g dry weight (dwt.) basis using the following calculation:

$$Protein\ Level\ in\ Dry\ Weight = \frac{(Protein\ Level\ Fresh\ Weight)}{(DWCF)}$$

The DWCF was only applied to samples with protein levels greater than or equal to each assay's limit of quantitation (LOQ).

4.6 Data Analyses

A SPECTRAmax Plus (Molecular Devices, Sunnyvale, CA) microplate spectrophotometer was utilized for analysis of all Cry1A.105 and Cry2Ab2 ELISA plates. Cry3Bb1 and CP4 EPSPS ELISA plates were analyzed either on a SPECTRAmax Plus or a SPECTRAFluor Plus (Tecan, Research Triangle Park, NC) microplate spectrophotometer depending on whether they were run manually or run using the TECAN automated workstation, respectively. All protein concentrations were determined by optical absorbance at a wavelength of 450 nm with a simultaneous reference reading of 620-650 nm. Data reduction analyses were performed using Molecular Devices SOFTmax PRO version 4.7.1. Absorbance readings and protein standard concentrations were fitted with a four-parameter logistic curve fit. Following the interpolation from the standard curve, the amount of protein (ng/ml) in the tissue was reported on a "µg/g fwt." basis. For all proteins, this conversion utilized a sample dilution factor and a tissue-to-buffer ratio. The protein values in "µg/g fwt." were also converted to "µg/g dwt." by applying the DWCF. Microsoft Excel 2002 (10.6823.6825) SP3, (Microsoft, Redmond, WA) was used to calculate the dry weight-corrected Cry1A.105, Cry2Ab2, Cry3Bb1, and CP4 EPSPS protein levels in corn tissues.

4.7 Protocol Deviations

Protocol deviations were written as follows: To correct the year referenced in the proposed start and termination dates of the study and to allow for the use of an alpha-numeric racked tube system for extract storage. These deviations had no impact on the data generated in the study.

Three protocol deviations were also written to address preparation of tissue specific site pools for moisture analysis. The tissue specific site pools for OSR-1 from site IA-1 and IL-1 were prepared with seven instead of eight samples. The pool prepared for OSR-1 from site IL-2 contained a sample which had not been intended for use in this study, as PCR analysis was unable to verify its identity. There is no impact on the data generated since the sample was used for moisture analysis only, which is not protein specific. Finally, one grain sample from site IA-1 was used in preparing the pool for site IA-2 but because the DWCFs for these two sites were comparable there is minimal impact on the data generated.

5.0 Results

5.1 Cry1A.105 Protein Levels in Corn

Summaries of mean, standard deviation, and range of the Cry1A.105 protein levels reported on a µg/g fwt. and µg/g dwt. basis in corn tissues collected from five U.S. field sites in 2006 for MON 89034 × TC1507 × MON 88017 × DAS-59122-7 and positive control, MON 89034, are presented in Tables 1 through 4. The levels of

Cry1A.105 protein in tissue samples from the conventional control were below the Cry1A.105 assay LOQ or LOD for each tissue type, as expected.

The mean Cry1A.105 protein levels in MON 89034 × TC1507 × MON 88017 × DAS-59122-7 across all sites were 4.3 µg/g dwt. in grain, 19 µg/g dwt. in forage (OSWP-2), 14 µg/g dwt. in pollen, 140 µg/g dwt. in OSL-1, and 73 µg/g dwt. in OSR-1. In tissues harvested throughout the growing season, mean Cry1A.105 protein levels in MON 89034 × TC1507 × MON 88017 × DAS-59122-7 across all sites ranged from 47-210 µg/g dwt. in leaf, 11-100 µg/g dwt. in root, and 3.8-86 µg/g dwt. in whole plant.

5.2 Cry2Ab2 Protein Levels in Corn

Summaries of mean, standard deviation, and range of the Cry2Ab2 protein levels reported on a µg/g fwt. and µg/g dwt. basis in corn tissues collected from five U.S. field sites in 2006 for MON 89034 × TC1507 × MON 88017 × DAS-59122-7, and positive control, MON 89034, are presented in Tables 5 through 8. The levels of Cry2Ab2 protein in tissue samples from the conventional control were below the Cry2Ab2 assay LOQ or LOD for each tissue type.

The mean Cry2Ab2 protein levels in MON 89034 × TC1507 × MON 88017 × DAS-59122-7 across all sites were 5.7 µg/g dwt. in grain, 29 µg/g dwt. in forage (OSWP-2), 0.81 µg/g dwt. in pollen, 220 µg/g dwt. in OSL-1, and 54 µg/g dwt. in OSR-1. In tissues harvested throughout the growing season, mean Cry2Ab2 protein levels in MON 89034 × TC1507 × MON 88017 × DAS-59122-7 across all sites ranged from 60-350 µg/g dwt. in leaf, 4.1-120 µg/g dwt. in root, and 4.5-80 µg/g dwt. in whole plant.

5.3 Cry3Bb1 Protein Levels in Corn

Summaries of mean, standard deviation, and range of the Cry3Bb1 protein levels reported on a µg/g fwt. and µg/g dwt. basis in corn tissues collected from five U.S. field sites in 2006 for MON 89034 × TC1507 × MON 88017 × DAS-59122-7, and positive control MON 88017 are presented in Tables 9 through 12. The levels of Cry3Bb1 protein in tissue samples from the conventional control were below the Cry3Bb1 assay LOQ or LOD for each tissue type.

The mean Cry3Bb1 protein levels in MON 89034 × TC1507 × MON 88017 × DAS-59122-7 across all sites were 18 µg/g dwt. in grain, 48 µg/g dwt. in forage (OSWP-2), 15 µg/g dwt. in pollen, 310 µg/g dwt. in OSL-1, and 160 µg/g dwt. in OSR-1. In tissues harvested throughout the growing season, mean Cry3Bb1 protein levels in MON 89034 × TC1507 × MON 88017 × DAS-59122-7 across all sites ranged from 90-490 µg/g dwt. in leaf, 23-260 µg/g dwt. in root, and 8.9-220 µg/g dwt. in whole plant.

5.4 CP4 EPSPS Protein Levels in Corn

Summaries of mean, standard deviation, and range of the CP4 EPSPS protein levels reported on a µg/g fwt. and µg/g dwt. basis in corn tissues collected from five U.S.

field sites in 2006 for MON 89034 × TC1507 × MON 88017 × DAS-59122-7 and positive control MON 88017 are presented in Tables 13 through 16. The levels of CP4 EPSPS protein in tissue samples from the conventional control were below the CP4 EPSPS assay LOQ or LOD for each tissue type.

The mean CP4 EPSPS protein levels in MON 89034 × TC1507 × MON 88017 × DAS-59122-7 across all sites were 5.2 µg/g dwt. in grain, 42 µg/g dwt. in forage (OSWP-2), 310 µg/g dwt. in pollen, 190 µg/g dwt. in OSL-1, and 99 µg/g dwt. in OSR-1. In tissues harvested throughout the growing season, mean CP4 EPSPS protein levels in MON 89034 × TC1507 × MON 88017 × DAS-59122-7 across all sites ranged from 80-270 µg/g dwt. in leaf, 25-140 µg/g dwt. in root, and 5.1-120 µg/g dwt. in whole plant.

5.5 Stability of Test Materials

All of the test and control substances were extracted and analyzed by ELISA within the time frame of verified tissue stability for the Cry1A.105, Cry2Ab2, Cry3Bb1, and CP4 EPSPS proteins with the exception of CP4 EPSPS in OSL-1 tissues from site IL-2. Stability of CP4 EPSPS in processed leaf tissue has been demonstrated for 100 days. The OSL-1 samples were stored in a -80°C freezer for 248 days. However, CP4 EPSPS expression values for leaf tissues from the IL-2 site are comparable to values generated for tissues obtained from the other sites.

6.0 Conclusions

Monsanto Company and Dow AgroSciences have used conventional breeding techniques to develop the combined trait corn product MON 89034 × TC1507 × MON 88017 × DAS-59122-7 that confers insect resistance and herbicide tolerance.

This combined trait corn product was grown in U.S. field trials at five field sites in 2006. Tissue samples were collected at various growth stages throughout the growing season and analyzed for Cry1A.105, Cry2Ab2, Cry3Bb1, and CP4 EPSPS protein levels using validated ELISA methods. These data show that the levels of Cry1A.105, Cry2Ab2, Cry3Bb1, and CP4 EPSPS proteins on a fresh weight and dry weight basis in eleven tissue types throughout the growing season in the combined trait corn product MON 89034 × TC1507 × MON 88017 × DAS-59122-7 are comparable to protein levels in the positive controls substances, MON 89034 and MON 88017, as appropriate.

7.0 Acknowledgments

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8.0 References

Klug, K. 2006. A U.S. Field Production of Corn Grain and Tissues from NK603, MON 89034, TC1507, MON 88017, DAS-59122-7, Conventional Crosses MON 88017 × DAS-59122-7, MON 89034 × MON 88017 × DAS-59122-7, MON 89034 × TC1507 × NK603, MON 89034 × TC1507 × MON 88017 × DAS-59122-7, and a Conventional Control During 2006. Monsanto Technical Report, St. Louis, MO, MSL0020639.

Ritchie, S.W., Hanway, J.J., and Benson, G.O. January 1997. How a Corn Plant Develops: Special Report #48. Iowa State University of Science and Technology Cooperative Extension Service, Ames, IA.

Table 1. Summary of Cry1A.105 Protein Levels in Corn Leaf Tissues Collected from MON 89034 and MON 89034 × TC1507 × MON 88017 × DAS-59122-7 Produced in U.S. Field Trials Conducted in 2006

Tissue Type[1]	MON 89034		MON 89034 × TC1507 × MON 88017 × DAS-59122-7	
	Mean (SD)[2] Range[3] (µg/g fwt.)[4]	Mean (SD) Range (µg/g dwt.)[5]	Mean (SD) Range (µg/g fwt.)	Mean (SD) Range (µg/g dwt.)
OSL-1	21 (5.6) 14 - 30	130 (41) 85 - 200	22 (4.6) 16 - 32	140 (33) 100 - 210
OSL-2	13 (3.4) 8.5 - 19[6]	63 (13) 44 - 89	16 (4.8) 9.9 - 25	79 (22) 47 - 120
OSL-3	20 (7.2) 11 - 33	77 (28) 39 - 140	21 (6.7) 14 - 34	80 (24) 53 - 120

1. Tissues were collected at the following growth stages (Ritchie et al., 1997):
   a. OSL-1: V2-V4
   b. OSL-2: V8-V10
   c. OSL-3: R1
2. The mean and standard deviation were calculated across sites (MON 89034, n=14 except OSL-2, n=13; MON 89034 × TC1507 × MON 88017 × DAS-59122-7 n=15).
3. Minimum and maximum values were determined for each tissue type across sites.
4. Protein levels are expressed as microgram (µg) of protein per gram (g) of tissue on a fresh weight (fwt.) basis.
5. Protein levels are expressed as µg/g on a dry weight (dwt.) basis. The dry weight values were calculated by dividing the fwt. by the dry weight conversion factors obtained from moisture analysis data.
6. One OSL-2 sample at site IA-2 was <LOD. This sample is not included in the average or range calculations.

Table 2. Summary of Cry1A.105 Protein Levels in Corn Root Tissues Collected from MON 89034 and MON 89034 × TC1507 × MON 88017 × DAS-59122-7 Produced in U.S. Field Trials Conducted in 2006

Tissue Type[1]	MON 89034		MON 89034 × TC1507 × MON 88017 × DAS-59122-7	
	Mean (SD)[2] Range[3] (µg/g fwt.)[4]	Mean (SD) Range (µg/g dwt.)[5]	Mean (SD) Range (µg/g fwt.)	Mean (SD) Range (µg/g dwt.)
OSR-1	8.1 (2.7) 5.7 - 26[6]	70 (25) 48 - 240	8.4 (1.5) 6.0 - 12	73 (12) 55 - 100
OSR-2	6.0 (1.3) 4.1 - 8.9[7]	47 (13) 31 - 81	6.1 (1.1) 4.4 - 8.7[8]	47 (9.7) 32 - 64
OSR-3	3.9 (0.76) 2.8 - 5.5	20 (5.6) 15 - 34	4.0 (1.3) 2.2 - 6.5	21 (6.2) 11 - 30

1. Tissues were collected at the following growth stages (Ritchie et al., 1997):
   a. OSR-1: V2-V4
   b. OSR-2 V5-V6
   c. OSR-3 R1
2. The mean and standard deviation were calculated across sites (MON 89034 OSR-1 and OSR-2, n=13; MON 89034 OSR-3, n=14; MON 89034 × TC1507 × MON 88017 × DAS-59122-7 n=15 except OSR-2, n=14).
3. Minimum and maximum values were determined for each tissue type across sites.
4. Protein levels are expressed as microgram (µg) of protein per gram (g) of tissue on a fresh weight (fwt.) basis.
5. Protein levels are expressed as µg/g on a dry weight (dwt.) basis. The dry weight values were calculated by dividing the fwt. by the dry weight conversion factors obtained from moisture analysis data.
6. One OSR-1 sample at site IL-1 was <LOD. This sample is not included in the average or range calculations.
7. One OSR-2 sample at site IA-2 was <LOD. This sample is not included in the average or range calculations.
8. One OSR-2 sample at site NE was <LOD. This sample is not included in the average or range calculations.

Table 3. Summary of Cry1A.105 Protein Levels in Corn Whole Plant Tissues Collected from MON 89034 and MON 89034 × TC1507 × MON 88017 × DAS-59122-7 Produced in U.S. Field Trials Conducted in 2006

Tissue Type[1]	MON 89034		MON 89034 × TC1507 × MON 88017 × DAS-59122-7	
	Mean (SD)[2] Range[3] (µg/g fwt.)[4]	Mean (SD) Range (µg/g dwt.)[5]	Mean (SD) Range (µg/g fwt.)	Mean (SD) Range (µg/g dwt.)
OSWP-1	4.9 (1.9) 1.9 - 7.9	43 (14) 21 - 66	6.2 (2.4) 2.8 - 10	53 (17) 32 - 86
OSWP-2 (forage)	5.2 (2.1) 2.0 - 8.7	18 (7.5) 6.9 - 31	5.7 (1.8) 2.3 - 8.7	19 (5.2) 8.1 - 26
OSWP-3	4.3 (2.3) 1.9 - 9.6	8.8 (5.5) 3.9 - 22	5.4 (2.5) 2.1 - 9.8	11 (5.6) 3.8 - 21

1. Tissues were collected at the following growth stages (Ritchie et al., 1997):
   a. OSWP-1: V10-V12
   b. OSWP-2 (forage): R4-R5
   c. OSWP-3: R6
2. The mean and standard deviation were calculated across sites (MON 89034, n=14; MON 89034 × TC1507 × MON 88017 × DAS-59122-7 n=15).
3. Minimum and maximum values were determined for each tissue type across sites.
4. Protein levels are expressed as microgram (µg) of protein per gram (g) of tissue on a fresh weight (fwt.) basis.
5. Protein levels are expressed as µg/g on a dry weight (dwt.) basis. The dry weight values were calculated by dividing the fwt. by the dry weight conversion factors obtained from moisture analysis data.

Table 4. Summary of Cry1A.105 Protein Levels in Corn Pollen and Grain Collected from MON 89034 and MON 89034 × TC1507 × MON 88017 × DAS-59122-7 Produced in U.S. Field Trials Conducted in 2006

Tissue Type[1]	MON 89034		MON 89034 × TC1507 × MON 88017 × DAS-59122-7	
	Mean (SD)[2] Range[3] (µg/g fwt.)[4]	Mean (SD) Range (µg/g dwt.)[5]	Mean (SD) Range (µg/g fwt.)	Mean (SD) Range (µg/g dwt.)
Pollen	4.7 (1.8) 2.6 - 8.6	7.1 (2.0) 5.1 - 12	9.1 (2.8) 5.1 - 16	14 (3.0) 7.8 - 21
Grain	2.5 (0.35) 1.6 - 3.1	2.8 (0.40) 1.7 - 3.5	3.8 (0.39) 3.0 - 4.3	4.3 (0.44) 3.4 - 4.9

1. Tissues were collected at the following growth stages:
   a. Pollen: during pollen shed (R1)
   b. Grain: R6/maturity
2. The mean and standard deviation were calculated across sites ((MON 89034, n=14; MON 89034 × TC1507 × MON 88017 × DAS-59122-7 n=15).
3. Minimum and maximum values were determined for each tissue type across sites.
4. Protein levels are expressed as microgram (µg) of protein per gram (g) of tissue on a fresh weight (fwt.) basis.
5. Protein levels are expressed as µg/g on a dry weight (dwt.) basis. The dry weight values were calculated by dividing the fwt. by the dry weight conversion factors obtained from moisture analysis data.

Table 5. Summary of Cry2Ab2 Protein Levels in Corn Leaf Tissues Collected from MON 89034 and MON 89034 × TC1507 × MON 88017 × DAS-59122-7 Produced in U.S. Field Trials Conducted in 2006

Tissue Type[1]	MON 89034		MON 89034 × TC1507 × MON 88017 × DAS-59122-7	
	Mean (SD)[2] Range[3] (µg/g fwt.)[4]	Mean (SD) Range (µg/g dwt.)[5]	Mean (SD) Range (µg/g fwt.)	Mean (SD) Range (µg/g dwt.)
OSL-1	33 (7.7) 23 - 45	210 (53) 140 - 290	34 (10) 23 - 53	220 (69) 140 - 350
OSL-2	27 (14) 12 - 69[6]	140 (64) 76 - 330	28 (8.7) 9.7 - 41	140 (44) 60 - 200
OSL-3	48 (7.6) 34 - 60	180 (28) 120 - 240	48 (7.8) 36 - 60	180 (26) 140 - 220

1. Tissues were collected at the following growth stages (Ritchie et al., 1997):
   a. OSL-1: V2-V4
   b. OSL-2: V8-V10
   c. OSL-3: R1
2. The mean and standard deviation were calculated across sites (MON 89034 OSL-2, n=13; MON 89034 OSL-1 and OSL-3, n=14; MON 89034 × TC1507 × MON 88017 × DAS-59122-7 n=15).
3. Minimum and maximum values were determined for each tissue type across sites.
4. Protein levels are expressed as microgram (µg) of protein per gram (g) of tissue on a fresh weight (fwt.) basis.
5. Protein levels are expressed as µg/g on a dry weight (dwt.) basis. The dry weight values were calculated by dividing the fwt. by the dry weight conversion factors obtained from moisture analysis data.
6. One OSL-2 sample at site IA-2 was <LOD. This sample is not included in the average or range calculations.

Table 6. Summary of Cry2Ab2 Protein Levels in Corn Root Tissues Collected from MON 89034 and MON 89034 × TC1507 × MON 88017 × DAS-59122-7 Produced in U.S. Field Trials Conducted in 2006

Tissue Type[1]	MON 89034		MON 89034 × TC1507 × MON 88017 × DAS-59122-7	
	Mean (SD)[2] Range[3] (µg/g fwt.)[4]	Mean (SD) Range (µg/g dwt.)[5]	Mean (SD) Range (µg/g fwt.)	Mean (SD) Range (µg/g dwt.)
OSR-1	5.7 (1.6) 3.3 - 8.8[6]	50 (15) 28 - 80	6.2 (1.7) 3.7 - 8.7	54 (14) 32 - 76
OSR-2	8.6 (4.1) 2.9 - 14[7]	69 (35) 22 - 120	7.7 (3.9) 3.4 – 18[8]	58 (25) 26 - 120
OSR-3	3.1 (2.6) 0.85 - 8.9	16 (12) 4.0 - 40	3.5 (3.0) 0.85 - 11	18 (14) 4.1 - 49

1. Tissues were collected at the following growth stages (Ritchie et al., 1997):
   a. OSR-1: V2-V4
   b. OSR-2 V5-V6
   c. OSR-3 R1
2. The mean and standard deviation were calculated across sites (MON 89034 OSR-1 and OSR-2, n=13; MON 89034 OSR-3, n=14; MON 89034 × TC1507 × MON 88017 × DAS-59122-7 n=15 except OSR-2, n=14).
3. Minimum and maximum values were determined for each tissue type across sites.
4. Protein levels are expressed as microgram (µg) of protein per gram (g) of tissue on a fresh weight (fwt.) basis.
5. Protein levels are expressed as µg/g on a dry weight (dwt.) basis. The dry weight values were calculated by dividing the fwt. by the dry weight conversion factors obtained from moisture analysis data.
6. One OSR-1 sample at site IL-1 was <LOQ. This sample is not included in the average or range calculations.
7. One OSR-2 sample at site IA-2 was <LOQ. This sample is not included in the average or range calculations.
8. One OSR-2 sample at site NE was <LOQ. This sample is not included in the average or range calculations.

Table 7. Summary of Cry2Ab2 Protein Levels in Corn Whole Plant Tissues Collected from MON 89034 and MON 89034 × TC1507 × MON 88017 × DAS-59122-7 Produced in U.S. Field Trials Conducted in 2006

Tissue Type[1]	MON 89034		MON 89034 × TC1507 × MON 88017 × DAS-59122-7	
	Mean (SD)[2] Range[3] (µg/g fwt.)[4]	Mean (SD) Range (µg/g dwt.)[5]	Mean (SD) Range (µg/g fwt.)	Mean (SD) Range (µg/g dwt.)
OSWP-1	6.1 (3.3) 1.9 - 14	54 (30) 21 - 130	6.1 (2.5) 1.9 - 9.6	53 (20) 21 - 80
OSWP-2 (forage)	8.6 (3.4) 3.5 - 15	29 (12) 12 - 54	9.1 (4.3) 3.2 - 19	29 (11) 11 - 53
OSWP-3	7.3 (4.1) 1.8 - 16	15 (9.6) 3.6 - 38	7.9 (5.3) 2.4 - 18	16 (12) 4.5 - 41

1. Tissues were collected at the following growth stages (Ritchie et al., 1997):
   a. OSWP-1: V10-V12
   b. OSWP-2 (forage): R4-R5
   c. OSWP-3: R6
2. The mean and standard deviation were calculated across sites (MON 89034 n=14; MON 89034 × TC1507 × MON 88017 × DAS-59122-7 n=15).
3. Minimum and maximum values were determined for each tissue type across sites.
4. Protein levels are expressed as microgram (µg) of protein per gram (g) of tissue on a fresh weight (fwt.) basis.
5. Protein levels are expressed as µg/g on a dry weight (dwt.) basis. The dry weight values were calculated by dividing the fwt. by the dry weight conversion factors obtained from moisture analysis data.

Table 8. Summary of Cry2Ab2 Protein Levels in Corn Pollen and Grain Collected from MON 89034 and MON 89034 × TC1507 × MON 88017 × DAS-59122-7 Produced in U.S. Field Trials Conducted in 2006

Tissue Type[1]	MON 89034		MON 89034 × TC1507 × MON 88017 × DAS-59122-7	
	Mean (SD)[2] Range[3] (µg/g fwt.)[4]	Mean (SD) Range (µg/g dwt.)[5]	Mean (SD) Range (µg/g fwt.)	Mean (SD) Range (µg/g dwt.)
Pollen	0.53 (0.42) 0.16 - 1.8	0.76 (0.46) 0.31 - 2.2	0.56 (0.47) 0.12 - 1.8	0.81 (0.54) 0.18 - 2.3
Grain	4.9 (1.0) 2.4 - 6.3	5.6 (1.1) 2.7 - 7.1	5.0 (0.84) 3.6 - 6.7	5.7 (0.94) 4.1 - 7.5

1. Tissues were collected at the following growth stages:
   a. Pollen: during pollen shed (R1)
   b. Grain: R6/maturity
2. The mean and standard deviation were calculated across sites (MON 89034 n=14; MON 89034 × TC1507 × MON 88017 × DAS-59122-7 n=15 except Pollen, n=13).
3. Minimum and maximum values were determined for each tissue type across sites.
4. Protein levels are expressed as microgram (µg) of protein per gram (g) of tissue on a fresh weight (fwt.) basis.
5. Protein levels are expressed as µg/g on a dry weight (dwt.) basis. The dry weight values were calculated by dividing the fwt. by the dry weight conversion factors obtained from moisture analysis data.

Table 9. Summary of Cry3Bb1 Protein Levels in Corn Leaf Tissues Collected from MON 88017 and MON 89034 × TC1507 × MON 88017 × DAS-59122-7 Produced in U.S. Field Trials Conducted in 2006

Tissue Type[1]	MON 88017		MON 89034 × TC1507 × MON 88017 × DAS-59122-7	
	Mean (SD)[2] Range[3] (µg/g fwt.)[4]	Mean (SD) Range (µg/g dwt.)[5]	Mean (SD) Range (µg/g fwt.)	Mean (SD) Range (µg/g dwt.)
OSL-1	51 (22) 23 - 87	330 (150) 140 - 580	48 (19) 25 - 73	310 (130) 150 - 490
OSL-2	23 (7.4) 8.5 - 40	110 (34) 53 - 190	25 (3.1) 18 - 29	130 (19) 90 - 160
OSL-3	38 (5.7) 29 - 47	140 (25) 100 - 200	45 (20) 23 - 92	170 (69) 98 - 340

1. Tissues were collected at the following growth stages (Ritchie et al., 1997):
   a. OSL-1: V2-V4
   b. OSL-2: V8-V10
   c. OSL-3: R1
2. The mean and standard deviation were calculated across sites (MON 88017 n=14; MON 89034 × TC1507 × MON 88017 × DAS-59122-7 n=15).
3. Minimum and maximum values were determined for each tissue type across sites.
4. Protein levels are expressed as microgram (µg) of protein per gram (g) of tissue on a fresh weight (fwt.) basis.
5. Protein levels are expressed as µg/g on a dry weight (dwt.) basis. The dry weight values were calculated by dividing the fwt. by the dry weight conversion factors obtained from moisture analysis data.

Table 10. Summary of Cry3Bb1 Protein Levels in Corn Root Tissues Collected from MON 88017a nd MON 89034 × TC1507 × MON 88017 × DAS-59122-7 Produced in U.S. Field Trials Conducted in 2006

Tissue Type[1]	MON 88017		MON 89034 × TC1507 × MON 88017 × DAS-59122-7	
	Mean (SD)[2] Range[3] (µg/g fwt.)[4]	Mean (SD) Range (µg/g dwt.)[5]	Mean (SD) Range (µg/g fwt.)	Mean (SD) Range (µg/g dwt.)
OSR-1	16 (3.3) 9.8 - 21	140 (32) 81 - 190	19 (6.0) 11 - 31	160 (53) 95 - 260
OSR-2	16 (4.5) 9.9 - 26	120 (35) 71 - 170	14 (4.8) 8.8 - 23[6]	110 (35) 63 - 160
OSR-3	9.7 (3.2) 6.4 - 19	50 (22) 32 - 120	13 (5.1) 4.3 - 22	65 (25) 23 - 100

1. Tissues were collected at the following growth stages (Ritchie et al., 1997):
   a. OSR-1: V2-V4
   b. OSR-2 V5-V6
   c. OSR-3 R1
2. The mean and standard deviation were calculated across sites (MON 88017 n=14; MON 89034 × TC1507 × MON 88017 × DAS-59122-7 n=15 except OSR-2, n=14).
3. Minimum and maximum values were determined for each tissue type across sites.
4. Protein levels are expressed as microgram (µg) of protein per gram (g) of tissue on a fresh weight (fwt.) basis.
5. Protein levels are expressed as µg/g on a dry weight (dwt.) basis. The dry weight values were calculated by dividing the fwt. by the dry weight conversion factors obtained from moisture analysis data.
6. One sample at site NE was >100-fold below the mean µg/g fwt. for OSR-2. This sample is not included in the average or range calculations.

Table 11. Summary of Cry3Bb1 Protein Levels in Corn Whole Plant Tissues Collected from MON 88017 and MON 89034 × TC1507 × MON 88017 × DAS-59122-7 Produced in U.S. Field Trials Conducted in 2006

Tissue Type[1]	MON 88017		MON 89034 × TC1507 × MON 88017 × DAS-59122-7	
	Mean (SD)[2] Range[3] (µg/g fwt.)[4]	Mean (SD) Range (µg/g dwt.)[5]	Mean (SD) Range (µg/g fwt.)	Mean (SD) Range (µg/g dwt.)
OSWP-1	12 (4.8) 6.3 - 23	110 (38) 70 - 190	15 (5.5) 8.0 - 26	130 (40) 73 - 220
OSWP-2 (forage)	12 (4.5) 5.8 - 19	40 (14) 21 - 61	14 (5.1) 6.6 - 25	48 (16) 24 - 79
OSWP-3	12 (7.2) 3.4 - 25	24 (16) 6.9 - 58	13 (5.8) 5.0 - 25	25 (12) 8.9 - 49

1. Tissues were collected at the following growth stages (Ritchie et al., 1997):
   a. OSWP-1: V10-V12
   b. OSWP-2 (forage): R4-R5
   c. OSWP-3: R6
2. The mean and standard deviation were calculated across sites (MON 88017 n=14; MON 89034 × TC1507 × MON 88017 × DAS-59122-7 n=15).
3. Minimum and maximum values were determined for each tissue type across sites.
4. Protein levels are expressed as microgram (µg) of protein per gram (g) of tissue on a fresh weight (fwt.) basis.
5. Protein levels are expressed as µg/g on a dry weight (dwt.) basis. The dry weight values were calculated by dividing the fwt. by the dry weight conversion factors obtained from moisture analysis data.

Table 12. Summary of Cry3Bb1 Protein Levels in Corn Pollen and Grain Collected from MON 88017 and MON 89034 × TC1507 × MON 88017 × DAS-59122-7 Produced in U.S. Field Trials Conducted in 2006

Tissue Type[1]	MON 88017		MON 89034 × TC1507 × MON 88017 × DAS-59122-7	
	Mean (SD)[2] Range[3] (µg/g fwt.)[4]	Mean (SD) Range (µg/g dwt.)[5]	Mean (SD) Range (µg/g fwt.)	Mean (SD) Range (µg/g dwt.)
Pollen	8.2 (2.6) 4.3 - 13	12 (2.5) 8.1 - 16	9.6 (3.9) 4.9 - 19	15 (4.5) 7.5 - 24
Grain	17 (6.2) 10 - 34	20 (6.9) 12 - 38	16 (4.0) 9.1 - 23	18 (4.6) 10 - 26

1. Tissues were collected at the following growth stages:
   a. Pollen: during pollen shed (R1)
   b. Grain: R6/maturity
2. The mean and standard deviation were calculated across sites (MON 88017 n=14; MON 89034 × TC1507 × MON 88017 × DAS-59122-7 n=15).
3. Minimum and maximum values were determined for each tissue type across sites.
4. Protein levels are expressed as microgram (µg) of protein per gram (g) of tissue on a fresh weight (fwt.) basis.
5. Protein levels are expressed as µg/g on a dry weight (dwt.) basis. The dry weight values were calculated by dividing the fwt. by the dry weight conversion factors obtained from moisture analysis data.

Table 13. Summary of CP4 EPSPS Protein Levels in Corn Leaf Tissues Collected from MON 88017 and MON 89034 × TC1507 × MON 88017 × DAS-59122-7 Produced in U.S. Field Trials Conducted in 2006

Tissue Type[1]	MON 88017		MON 89034 × TC1507 × MON 88017 × DAS-59122-7	
	Mean (SD)[2] Range[3] (µg/g fwt.)[4]	Mean (SD) Range (µg/g dwt.)[5]	Mean (SD) Range (µg/g fwt.)	Mean (SD) Range (µg/g dwt.)
OSL-1	27 (6.1) 13 - 38	170 (43) 82 - 240	29 (6.9) 19 - 41	190 (49) 110 - 270
OSL-2	23 (6.6) 14 - 35	120 (28) 65 - 170	28 (7.4) 16 - 42	140 (36) 80 - 200
OSL-3	49 (12) 33 - 69	180 (32) 140 - 240	42 (8.3) 25 - 54	160 (21) 110 - 180

1. Tissues were collected at the following growth stages (Ritchie et al., 1997):
   a. OSL-1: V2-V4
   b. OSL-2: V8-V10
   c. OSL-3: R1
2. The mean and standard deviation were calculated across sites (MON 88017 n=14; MON 89034 × TC1507 × MON 88017 × DAS-59122-7 n=15).
3. Minimum and maximum values were determined for each tissue type across sites.
4. Protein levels are expressed as microgram (µg) of protein per gram (g) of tissue on a fresh weight (fwt.) basis.
5. Protein levels are expressed as µg/g on a dry weight (dwt.) basis. The dry weight values were calculated by dividing the fwt. by the dry weight conversion factors obtained from moisture analysis data.

Table 14. Summary of CP4 EPSPS Protein Levels in Corn Root Tissues Collected from MON 88017 and MON 89034 × TC1507 × MON 88017 × DAS-59122-7 Produced in U.S. Field Trials Conducted in 2006

Tissue Type[1]	MON 88017		MON 89034 × TC1507 × MON 88017 × DAS-59122-7	
	Mean (SD)[2] Range[3] (µg/g fwt.)[4]	Mean (SD) Range (µg/g dwt.)[5]	Mean (SD) Range (µg/g fwt.)	Mean (SD) Range (µg/g dwt.)
OSR-1	11 (2.4) 6.9 - 15	92 (20) 58 - 120	12 (1.8) 8.2 - 14	99 (14) 71 - 110
OSR-2	9.9 (3.3) 5.4 - 19	77 (23) 42 - 120	9.4 (3.9) 5.8 - 21[6]	72 (27) 42 - 140
OSR-3	6.7 (1.5) 3.9 - 9.5	34 (8.7) 21 - 58	6.9 (1.7) 4.7 - 11	35 (7.6) 25 - 50

1. Tissues were collected at the following growth stages (Ritchie et al., 1997):
   a. OSR-1: V2-V4
   b. OSR-2 V5-V6
   c. OSR-3 R1
2. The mean and standard deviation were calculated across sites (n=15, except MON 89034 × TC1507 × MON 88017 × DAS-59122-7 OSR-2, n=14).
3. Minimum and maximum values were determined for each tissue type across sites.
4. Protein levels are expressed as microgram (µg) of protein per gram (g) of tissue on a fresh weight (fwt.) basis.
5. Protein levels are expressed as µg/g on a dry weight (dwt.) basis. The dry weight values were calculated by dividing the fwt. by the dry weight conversion factors obtained from moisture analysis data.
6. One OSR-2 sample at site NE was <LOD. This sample is not included in the average or range calculations.

Table 15. Summary of CP4 EPSPS Protein Levels in Corn Whole Plant Tissues Collected from MON 88017 and MON 89034 × TC1507 × MON 88017 × DAS-59122-7 Produced in U.S. Field Trials Conducted in 2006

Tissue Type[1]	MON 88017		MON 89034 × TC1507 × MON 88017 × DAS-59122-7	
	Mean (SD)[2] Range[3] (µg/g fwt.)[4]	Mean (SD) Range (µg/g dwt.)[5]	Mean (SD) Range (µg/g fwt.)	Mean (SD) Range (µg/g dwt.)
OSWP-1	9.6 (3.3) 5.4 - 16	84 (26) 47 - 130	10 (2.4) 6.7 - 14	90 (15) 74 - 120
OSWP-2 (forage)	11 (2.4) 7.5 - 15	37 (8.6) 21 - 51	13 (2.8) 8.9 - 18	42 (7.7) 29 - 52
OSWP-3	6.1 (3.4) 1.9 - 13	12 (7.7) 3.1 - 26	7.3 (3.0) 2.5 - 12	15 (7.3) 5.1 - 27

1. Tissues were collected at the following growth stages (Ritchie et al., 1997):
   a. OSWP-1: V10-V12
   b. OSWP-2 (forage): R4-R5
   c. OSWP-3: R6
2. The mean and standard deviation were calculated across sites (MON 88017 n=14; MON 89034 × TC1507 × MON 88017 × DAS-59122-7 n=15).
3. Minimum and maximum values were determined for each tissue type across sites.
4. Protein levels are expressed as microgram (µg) of protein per gram (g) of tissue on a fresh weight (fwt.) basis.
5. Protein levels are expressed as µg/g on a dry weight (dwt.) basis. The dry weight values were calculated by dividing the fwt. by the dry weight conversion factors obtained from moisture analysis data.

Table 16. Summary of CP4 EPSPS Protein Levels in Corn Pollen and Grain Collected from MON 88017 and MON 89034 × TC1507 × MON 88017 × DAS-59122-7 Produced in U.S. Field Trials Conducted in 2006

Tissue Type[1]	MON 88017		MON 89034 × TC1507 × MON 88017 × DAS-59122-7	
	Mean (SD)[2] Range[3] (µg/g fwt.)[4]	Mean (SD) Range (µg/g dwt.)[5]	Mean (SD) Range (µg/g fwt.)	Mean (SD) Range (µg/g dwt.)
Pollen	170 (25) 110 - 210	260 (40) 170 - 340	200 (45) 130 – 260	310 (86) 190 – 480
Grain	4.3 (1.0) 3.0 – 6.6	4.9 (1.2) 3.3 – 7.4	4.6 (0.98) 3.1 – 6.4	5.2 (1.1) 3.5 – 7.1

1. Tissues were collected at the following growth stages:
   a. Pollen: during pollen shed (R1)
   b. Grain: R6/maturity
2. The mean and standard deviation were calculated across sites (MON 88017 Grain, n=14; MON 88017 Pollen, n=13; MON 89034 × TC1507 × MON 88017 × DAS-59122-7 n=15).
3. Minimum and maximum values were determined for each tissue type across sites.
4. Protein levels are expressed as microgram (µg) of protein per gram (g) of tissue on a fresh weight (fwt.) basis.
5. Protein levels are expressed as µg/g on a dry weight (dwt.) basis. The dry weight values were calculated by dividing the fwt. by the dry weight conversion factors obtained from moisture analysis data.

Appendix 1. Standard Operating Procedures

AG-EQ-1023-01	Denver Instruments IR-200 Moisture Analyzer
BR-ME-1027-01	Extraction and Indirect ELISA Analysis of Cry1A.105 in Corn Tissues
BR-ME-1026-01	Extraction and Indirect ELISA Analysis of Cry2Ab2 in Corn Tissues
BR-ME-0884-03	Extraction and Indirect ELISA Analysis of Cry3Bb1 in Corn Tissues
BR-ME-0197-06	Extraction and Direct ELISA Analysis of CP4 EPSPS in Corn Tissues

Appendix 2. Summary of the Validation Results for the Cry1A.105 Protein ELISA in Corn Matrices

1.0 Accuracy

1.1. Extraction Efficiency and Spike and Recovery

Extraction Efficiency acceptance criteria = 70 – 100%.
Spike and Recovery acceptance criteria = 70 – 130%.
Spike and Recovery acceptance criteria (grain) = 60 – 140%.

Tissue	Tissue-to-Buffer Ratio	Extraction Efficiency[1]	Spike and Recovery[2]
Forage	1:100	100 %	72 – 78 %
Leaf	1:50	100 %	74 – 85%
Pollen	1:100	92 %	79 – 83%
Root	1:50	88 %	100 – 105 %
Silk	1:50	85 %	86 – 92%
Grain	1:50	100 %	60 – 67 %

1. Extraction efficiency for each tissue type was determined by comparing an aqueous extract to an extract in harsh buffer (e.g. 1X Laemmli buffer) on a western blot.
2. To evaluate the analytical accuracy of the ELISA, extracts prepared from each tissue type of conventional corn plants were spiked with known quantities of Cry1A.105 protein at three concentrations spanning the range of the standard curve.

1.2. Matrix Effects

No matrix interferences (non-specific binding) were noted when sample extracts were analyzed at matrix dilutions stated below. Matrix Effects acceptance criteria = 70 – 130%.

Tissue	Minimal Dilution to Avoid Matrix Effects	Average Recovery Range
Forage	1:10	92 – 109 %
Leaf	1:30	84 – 95 %
Pollen	1:25	87 – 100 %
Root	1:15	88 – 111 %
Silk	1:20	91 – 96 %
Grain	1:50	99 – 108 %

1.3. Parallelism

Parallelism is defined as the plant-produced Cry1A.105 protein being immunologically equivalent to the *E. coli*-Cry1A.105 protein standard. Parallelism acceptance criteria = 70 – 130%.

Tissue	Parallelism between 70-130%
Forage	yes
Leaf	yes
Pollen	yes
Root	yes
Silk	yes
Grain	yes

2.0 Precision

Range of Quantitation: 0.438 – 14 ng/ml
Method for Curve Fit 4-parameter

Intra-Assay Precision Acceptance Criteria: ≤ 15%
Inter-Assay Precision Acceptance Criteria: ≤ 25%
Precision Profile Acceptance Criteria: Standards 1-5 ≤ 15%
Standard 6 ≤ 25%

Intra-Assay Precision[3]: 3.8 %
Inter-Assay Precision[3]: 11.8 %
Intra-Assay Precision (Grain)[4]: 5.3 %
Inter-Assay Precision (Grain)[4]: 13.2 %

3. The inter- and intra-assay precision were assessed by determining the CV of the concentration of Cry1A.105 protein measured for the positive control sample from 57 independent ELISAs using one-way analysis of variance (ANOVA).
4. The inter- and intra-assay precision were assessed by determining the CV of the concentration of Cry1A.105 protein measured for the positive control sample from 21 independent ELISAs using one-way analysis of variance (ANOVA).

Precision Profile:

Standard Number	Concentration (ng/ml)	%CV (over 57 runs)
1	14	6.8 %
2	7	5.3 %
3	3.5	6.2 %
4	1.75	5.0 %
5	0.875	5.9 %
6	0.438	9.3 %

The total intra-assay precision based on the standard curve was calculated to be 6.4%.

Precision Profile (Grain):

Standard Number	Concentration (ng/ml)	%CV (over 21 runs)
1	14	6.4 %
2	7	6.7 %
3	3.5	6.8 %
4	1.75	7.2 %
5	0.875	8.3 %
6	0.438	12.0 %

The total intra-assay precision based on the standard curve was calculated to be 7.9%.

3.0 Sensitivity

3.1. Limits of Detection and Quantitation

Tissue Type	Dilution	LOD (ng/ml)	LOD[5] (µg/g fwt.)	LOQ (ng/ml)	LOQ[6] (µg/g fwt.)
Forage	1:10	0.372	0.372	0.438	0.44
Leaf	1:30	0.379	0.568	0.438	0.66
Pollen	1:25	0.165	0.412	0.438	1.1
Root	1:15	0.338	0.254	0.438	0.33
Silk	1:20	0.275	0.275	0.438	0.44
Grain	1:50	0.105	0.262	0.438	1.1

5. The limit of detection (LOD) was calculated as the mean value plus three SD using the data generated with conventional sample extracts for each tissue type. The LOD value in "ng/ml" was converted to "µg/g fwt." using the respective dilution factor and tissue-to-buffer ratio.
6. The limit of quantitation (LOQ) was calculated based on the lowest standard concentration. The "ng/ml" value was converted to "µg/g fwt." using the respective dilution factor and tissue-to-buffer ratio.

4.0 Extraction Parameters

Tissue Type	Tissue-to-Buffer Ratio	Extraction Buffer[7]
Forage	1:100	1X TBA + 2 M Urea + 0.1 M DTT
Grain	1:50	1X TBA + 2 M Urea + 0.1 M DTT
Leaf	1:50	1X TBA + 2 M Urea + 0.1 M DTT
Pollen	1:100	1X SEBA + 10 mM NLS
Root	1:50	1X TBA + 2 M Urea + 0.1 M DTT
Silk	1:50	1X TBA + 2 M Urea + 0.1 M DTT

7. The Cry1A.105 protein was extracted from each tissue by adding the appropriate volume of Cry1A.105 Extraction Buffer, and shaking in a Harbil mixer. The extracted sample was clarified using a serum filter or by centrifugation (pollen tissue only).

Appendix 3. Summary of the Validation Results for the Cry2Ab2 Protein ELISA in Corn Matrices

1.0 Accuracy

1.1. Extraction Efficiency and Spike and Recovery

Extraction Efficiency acceptance criteria = 70 – 100%.
Spike and Recovery acceptance criteria = 70 – 130%.
Spike and Recovery acceptance criteria (grain) = 60 – 140%.

Tissue Matrix	Tissue-to-Buffer Ratio	Extraction Efficiency[1]	Spike and Recovery[2]
Forage	1:100	92 %	90 – 92 %
Grain	1:50	73 %	84 – 88 %
Leaf	1:100	92 %	84 – 92 %
Pollen	1:25	N/A[3]	85 – 93 %
Root	1:50	94 %	82 – 87 %
Silk	1:50	93 %	83 – 90 %

1. Extraction efficiency for each tissue type was determined by comparing an aqueous extract to an extract in harsh buffer (e.g. 1X Laemmli buffer) on a western blot.
2. To evaluate the analytical accuracy of the ELISA, extracts prepared from each tissue type of conventional corn plants were spiked with known quantities of Cry2Ab2 protein at three concentrations spanning the range of the standard curve.
3. The extraction efficiency experiment was not completed for pollen tissue due to very low protein levels.

1.2. Matrix Effects

No matrix interferences (non-specific binding) were noted when sample extracts were analyzed at matrix dilutions stated below. Matrix Effects acceptance criteria = 70 – 130%.

Tissue	Minimal Dilution to Avoid Matrix Effects	Average Recovery Range
Forage	1:20	97 – 105 %
Grain	1:20	86 – 90 %
Leaf	1:20	84 – 93 %
Pollen	1:20	88 – 97 %
Root	1:20	94 – 104 %
Silk	1:20	85 – 95 %

1.3. Parallelism

Parallelism is defined as the plant-produced Cry2Ab2 protein being immunologically equivalent to the *E. coli*-Cry2Ab2 protein standard. Parallelism acceptance criteria = 70 – 130%.

Tissue	Parallelism between 70-130%
Forage	yes
Grain	yes
Leaf	yes
Pollen	N/A[4]
Root	yes
Silk	yes

4. The parallelism experiment was not completed for pollen tissue due to very low protein levels.

2.0 Precision

Range of Quantitation:	0.219 – 7 ng/ml	
Method for Curve Fit	4-parameter	
Intra-Assay Precision Acceptance Criteria:		≤ 15%
Inter-Assay Precision Acceptance Criteria:		≤ 25%
Precision Profile Acceptance Criteria:	Standards 1-5	≤ 15%
	Standard 6	≤ 25%

Intra-Assay Precision[5]: 6.0 %
Inter-Assay Precision[5]: 21.2 %

5. The inter- and intra-assay precision were assessed by determining the CV of the concentration of Cry2Ab2 protein measured for the positive control sample from 24 independent ELISAs using one-way analysis of variance (ANOVA).

Precision Profile:

Standard Number	Concentration (ng/ml)	%CV (over 24 runs)
1	7	5.1
2	3.5	5.2
3	1.75	4.7
4	0.875	4.0
5	0.438	6.5
6	0.219	5.8

The total intra-assay precision based on the standard curve was calculated to be 5.2%.

3.0 Sensitivity

3.1. Limits of Detection and Quantitation

Tissue Type	Dilution	LOD (ng/ml)	LOD[6] (µg/g fwt.)	LOQ (ng/ml)	LOQ[7] (µg/g fwt.)
Forage	1:20	0.095	0.191	0.219	0.44
Leaf	1:20	0.041	0.081	0.219	0.44
Grain	1:20	0.123	0.123	0.219	0.22
Pollen	1:20	0.109	0.055	0.219	0.11
Root	1:20	0.056	0.056	0.219	0.22
Silk	1:20	0.040	0.040	0.219	0.22

6. The limit of detection (LOD) was calculated as the mean value plus three SD using the data generated with conventional sample extracts for each tissue type. The LOD value in "ng/ml" was converted to "µg/g fwt." using the respective dilution factor and tissue-to-buffer ratio.
7. The limit of quantitation (LOQ) was calculated based on the lowest standard concentration. The "ng/ml" value was converted to "µg/g fwt." using the respective dilution factor and tissue-to-buffer ratio.

4.0 Extraction Parameters

Tissue Type	Tissue-to-Buffer Ratio	Extraction Buffer[8]
Leaf	1:100	1X Tris-Borate buffer
Grain	1:50	1X Tris-Borate buffer
Pollen	1:25	1X Tris-Borate buffer
Forage	1:100	1X Tris-Borate buffer
Root	1:50	1X Tris-Borate buffer
Silk	1:50	1X Tris-Borate buffer

8. The Cry2Ab2 protein was extracted from each tissue by adding the appropriate volume of Cry2Ab2 Extraction Buffer, and shaking in a Harbil mixer. The extracted sample was clarified using a serum filter or by centrifugation (pollen only).

Appendix 4. Summary of the Validation Results for the Cry3Bb1 Protein ELISA in Corn Matrices

1.0 Accuracy

1.1. Extraction Efficiency and Spike and Recovery

Extraction Efficiency acceptance criteria = 70 – 100%.
Spike and Recovery acceptance criteria = 70 – 130%.

Tissue	Tissue-to-Buffer Ratio	Extraction Efficiency[1] (%)	Spike and Recovery[2] (%)
Forage	1:100	82	92
Grain	1:100	85	80
Leaf	1:100	93	85
Pollen	1:100	99	90
Root	1:100	81	107
Silk	1:100	95	91

1. Extraction efficiency for each tissue type was determined by successive extraction of three replicates, where the last extraction employed a harsh buffer (e.g., 1X Laemmli buffer).
2. To evaluate the analytical accuracy of the ELISA, extracts prepared from each tissue type of conventional corn plants were spiked with known quantities of Cry3Bb1 protein at three concentrations spanning the range of the standard curve.

1.2. Matrix Effects

No matrix interferences (non-specific binding) were noted when sample extracts were analyzed at matrix dilutions stated below. Matrix Effects acceptance criteria = 70 – 130%.

Tissue	Matrix Dilution
Forage	Undiluted
Grain	Undiluted
Leaf	Undiluted
Pollen	Undiluted
Root	Undiluted
Silk	Undiluted

1.3. Parallellism

Parallelism is defined as the plant-produced Cry3Bb1 protein being immunologically equivalent to the *E. coli*-Cry3Bb1 protein standard. Parallelism acceptance criteria = 70 – 130%.

Tissue	Parallelism between 70-130%
Forage	yes
Grain	yes
Leaf	yes
Pollen	yes
Root	yes
Silk	yes

2.0 Precision

Standard Curve Precision Range (CV):	7.1 to 15%
Range of Quantitation:	0.35 – 11.2 ng/ml
Intra-Assay Precision (CV)[3]	5.7%
Inter-Assay Precision (CV)[3]	21%

3. The inter- and intra-assay precision were assessed by determining the CV of the concentration of Cry3b1 protein measured for the positive control sample from 24 independent ELISAs using one-way analysis of variance (ANOVA).

3.0 Sensitivity

3.1. Limits of Detection

Tissue Type	Dilution	LOD[4] (ng/ml)
Forage	Undiluted	0.076
Grain	Undiluted	0.066
Leaf	Undiluted	0.058
Pollen	Undiluted	0.18
Root	Undiluted	0.28
Silk	Undiluted	0.10

4. The limit of detection (LOD) was calculated as the mean value plus three SD using the data generated with conventional sample extracts for each tissue type.

3.2. Limits of Quantitation

Tissue Type	Dilution	LOQ[5] (ng/ml)
Forage	Neat	0.35
Grain	Neat	0.35
Leaf	Neat	0.35
Pollen	Neat	0.35
Root	Neat	0.35
Silk	Neat	0.35

5. The limit of quantitation (LOQ) was calculated based on the lowest standard concentration. The "ng/ml" value was converted to "µg/g fwt." using the respective dilution factor and tissue-to-buffer ratio.

4.0 Extraction Parameters

Tissue Type	Tissue-to-Buffer Ratio	Extraction Buffer[6]
Forage	1:100	50 mM Carbonate-Bicarbonate with 0.1% (w/v) BSA
Grain	1:100	50 mM Carbonate-Bicarbonate with 0.1% (w/v) BSA
Leaf	1:100	50 mM Carbonate-Bicarbonate with 0.1% (w/v) BSA
Pollen	1:100	50 mM Carbonate-Bicarbonate with 0.1% (w/v) BSA
Root	1:100	50 mM Carbonate-Bicarbonate with 0.1% (w/v) BSA
Silk	1:100	50 mM Carbonate-Bicarbonate with 0.1% (w/v) BSA

6. The Cry3Bb1 protein was extracted from each tissue by adding the appropriate volume of Cry3Bb1 Extraction Buffer, and shaking in a Harbil mixer. The extracted sample was clarified using a serum filter.

Appendix 5. Summary of the Validation Results for the CP4 EPSPS Protein ELISA in Corn Matrices

1.0 Accuracy

1.1. Extraction Efficiency and Spike and Recovery

Extraction Efficiency (leaf, forage, root, pollen) acceptance criteria = 70 – 100%.
Extraction Efficiency (grain) acceptance criteria = 60 – 100%.
Spike and Recovery acceptance criteria = 70 – 130%.

Tissue	Tissue-to-Buffer Ratio	Extraction Efficiency[1] (%)	Spike and Recovery[2] (%)
Forage	1:100	85	76
Leaf	1:100	92	86
Pollen	1:100	98	80
Root	1:50	83	80
Grain	1:100	78	105

1. Extraction efficiency for each tissue type was determined by successive extraction of three replicates, where the last extraction employed a harsh buffer (e.g., 1X Laemmli buffer).
2. To evaluate the analytical accuracy of the ELISA, extracts prepared from each tissue type of conventional corn plants were spiked with known quantities of CP4 EPSPS protein at three concentrations spanning the range of the standard curve.

1.2. Matrix Effects

No matrix interferences (non-specific binding) were noted when sample extracts were analyzed at matrix dilutions stated below. Matrix Effects acceptance criteria = 70 – 130%.

Tissue	Matrix Dilution
Forage	1:3
Leaf	1:3
Pollen	1:3
Root	1:3
Grain	1:5

1.3. Parallelism

Parallelism is defined as the plant-produced CP4 EPSPS protein being immunologically equivalent to the *E. coli*-produced CP4 EPSPS protein standard. Parallelism acceptance criteria = 70 – 130%.

Tissue	Parallelism between 70-130%
Forage	yes
Leaf	yes
Pollen	yes
Root	yes
Grain	yes

2.0 Precision

Range of Quantitation:	0.456 – 14.6 ng/ml
Forage, Leaf, Pollen, and Root:	
Standard Curve Precision Range (CV):	4.1 – 10%
Intra-Assay Precision (CV)[3]	8.6%
Inter-Assay Precision (CV)[3]	15%
Grain:	
Standard Curve Precision Range (CV):	7.0 – 15%
Intra-Assay Precision (CV)	9.7%
Inter-Assay Precision (CV)	17%

3. The inter- and intra-assay precision were assessed by determining the CV of the concentration of CP4 EPSPS protein measured for the positive control sample from 24 independent ELISAs using one-way analysis of variance (ANOVA).

3.0 Sensitivity

3.1. Limits of Detection

Tissue Type	Dilution	LOD[4] (ng/ml)
Forage	1:3	0.23
Leaf	1:3	0.23
Pollen	1:3	0.33
Root	1:3	0.22
Grain	1:5	0.31

4. The limit of detection (LOD) was calculated as the mean value plus three SD using the data generated with conventional sample extracts for each tissue type.

3.2. Limits of Quantitation

Tissue Type	Dilution	LOQ[5](ng/ml)
Forage	1:3	0.46
Leaf	1:3	0.46
Pollen	1:3	0.46
Root	1:3	0.46
Grain	1:5	0.46

5. The limit of quantitation (LOQ) was calculated based on the lowest standard concentration. The "ng/ml" value was converted to "µg/g fwt." using the respective dilution factor, tissue-to-buffer ratio, and a tissue-specific method bias correction factor.

4.0 Extraction Parameters

Tissue Type	Tissue-to-Buffer Ratio	Extraction Buffer[6]
Forage	1:100	1X PBST with 0.1% (w/v) BSA
Leaf	1:100	1X PBST with 0.1% (w/v) BSA
Pollen	1:100	1X PBST with 0.1% (w/v) BSA
Root	1:50	1X PBST with 0.1% (w/v) BSA
Grain	1:100	1X TBA with 10 mM DCA

6. The CP4 EPSPS protein was extracted from each tissue by adding the appropriate volume of CP4 EPSPS Extraction Buffer, and shaking in a Harbil mixer. The extracted sample was clarified using a serum filter.

Raw data from Stillwell, L. and Silvanovich, A. (2007) Assessment of Cry1A.105, Cry2Ab2, Cry3Bb1, and CP4 EPSPS protein levels in the combined trait corn product MON 89034 × TC1507 × MON 88017 × DAS-59122-7 produced in U.S. field trials during 2006 Monsanto Technical Report, MSL0021070

	A	B	C	D	E	F	G	H	I	J
1	**Cry1A.105 Protein Levels in Overseason Leaf Tissues**									
2	Study# 06-01-52-18									
3										
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**			
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IA-1	31.69	211.23					
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IA-1	25.61	170.73					
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IA-1	26.14	174.27					
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IA-2	17.12	100.71					
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IA-2	22.16	130.35					
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IA-2	23.48	138.09					
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IL-1	16.13	100.78					
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IL-1	15.92	99.50					
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IL-1	16.61	103.78					
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IL-2	17.49	109.28					
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IL-2	22.56	140.97					
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IL-2	22.41	140.06					
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	NE	25.28	168.50					
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	NE	22.43	149.53					
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	NE	18.32	122.10	22	140			
20	MON 89034	OSL-1	IA-1	26.83	178.83					
21	MON 89034	OSL-1	IA-1	30.05	200.30					
22	MON 89034	OSL-1	IA-1	29.25	194.97					
23	MON 89034	OSL-1	IA-2	20.31	119.47					
24	MON 89034	OSL-1	IA-2	16.87	99.21					
25	MON 89034	OSL-1	IA-2	15.77	92.74					
26	MON 89034	OSL-1	IL-1	14.51	90.66					
27	MON 89034	OSL-1	IL-1	13.64	85.25					
28	MON 89034	OSL-1	IL-1	14.14	88.34					
29	MON 89034	OSL-1	IL-2	20.96	131.00					
30	MON 89034	OSL-1	IL-2	16.74	104.63					
31	MON 89034	OSL-1	NE	22.96	153.03					
32	MON 89034	OSL-1	NE	23.73	158.17					
33	MON 89034	OSL-1	NE	23.98	159.83	21	130			
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Initials_____

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	A	B	C	D	E	F	G	H	I	J
1	**Cry1A.105 Protein Levels in Overseason Leaf Tissues**									
2	Study# 06-01-52-18									
3										
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**			
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IA-1	22.69	108.05					
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IA-1	19.81	94.31					
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IA-1	21.33	101.55					
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IA-2	14.18	70.90					
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IA-2	15.28	76.40					
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IA-2	13.62	68.08					
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IL-1	10.47	49.83					
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IL-1	10.38	49.40					
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IL-1	9.94	47.33					
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IL-2	18.37	87.45					
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IL-2	24.68	117.50					
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IL-2	16.10	76.67					
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	NE	15.50	96.84					
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	NE	11.99	74.94					
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	NE	10.71	66.91	16	79			
20	MON 89034	OSL-2	IA-1	16.09	76.62					
21	MON 89034	OSL-2	IA-1	15.38	73.21					
22	MON 89034	OSL-2	IA-1	16.74	79.71					
23	MON 89034	OSL-2	IA-2	12.78	63.90					
24	MON 89034	OSL-2	IA-2	12.18	60.90					
25	MON 89034	OSL-2	IL-1	10.73	51.10					
26	MON 89034	OSL-2	IL-1	9.28	44.17					
27	MON 89034	OSL-2	IL-1	10.19	48.50					
28	MON 89034	OSL-2	IL-2	14.30	68.10					
29	MON 89034	OSL-2	IL-2	18.60	88.55					
30	MON 89034	OSL-2	NE	8.64	53.97					
31	MON 89034	OSL-2	NE	8.49	53.03					
32	MON 89034	OSL-2	NE	9.27	57.94	13	63			
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	A	B	C	D	E	F	G	H	I	J
1	**Cry1A.105 Protein Levels in Overseason Leaf Tissues**									
2	Study# 06-01-52-18									
3										
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**			
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IA-1	18.20	67.39					
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IA-1	14.41	53.37					
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IA-1	16.27	60.24					
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IA-2	17.31	59.67					
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IA-2	18.59	64.09					
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IA-2	17.56	60.53					
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IL-1	17.37	72.38					
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IL-1	14.97	62.35					
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IL-1	16.06	66.90					
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IL-2	16.59	72.13					
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IL-2	25.29	109.96					
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IL-2	27.67	120.30					
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	NE	31.40	108.28					
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	NE	29.88	103.03					
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	NE	34.43	118.72	21	80			
20	MON 89034	OSL-3	IA-1	15.79	58.46					
21	MON 89034	OSL-3	IA-1	16.23	60.11					
22	MON 89034	OSL-3	IA-1	19.32	71.54					
23	MON 89034	OSL-3	IA-2	14.84	51.17					
24	MON 89034	OSL-3	IA-2	17.05	58.79					
25	MON 89034	OSL-3	IA-2	11.43	39.40					
26	MON 89034	OSL-3	IL-1	14.77	61.54					
27	MON 89034	OSL-3	IL-1	14.91	62.10					
28	MON 89034	OSL-3	IL-1	14.56	60.65					
29	MON 89034	OSL-3	IL-2	25.64	111.48					
30	MON 89034	OSL-3	IL-2	31.26	135.91					
31	MON 89034	OSL-3	NE	26.78	92.33					
32	MON 89034	OSL-3	NE	29.01	100.03					
33	MON 89034	OSL-3	NE	32.77	112.98	20	77			
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	A	B	C	D	E	F	G	H	I	J
1	**Cry1A.105 Protein Levels in Overseason Root Tissues**									
2	Study# 06-01-52-18									
3										
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**			
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IA-1	9.94	90.40					
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IA-1	8.06	73.24					
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IA-1	9.04	82.21					
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IA-2	7.18	59.82					
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IA-2	9.35	77.89					
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IA-2	8.80	73.36					
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IL-1	8.17	68.11					
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IL-1	9.02	75.19					
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IL-1	9.36	77.96					
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IL-2	6.41	58.28					
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IL-2	6.02	54.69					
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IL-2	7.20	65.42					
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	NE	7.67	63.93					
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	NE	12.19	101.56					
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	NE	8.08	67.36	8.4	73			
20	MON 89034	OSR-1	IA-1	7.51	68.30					
21	MON 89034	OSR-1	IA-1	6.87	62.41					
22	MON 89034	OSR-1	IA-1	9.46	85.97					
23	MON 89034	OSR-1	IA-2	6.59	54.88					
24	MON 89034	OSR-1	IA-2	10.21	85.08					
25	MON 89034	OSR-1	IA-2	6.89	57.43					
26	MON 89034	OSR-1	IL-1	6.32	52.64					
27	MON 89034	OSR-1	IL-1	7.20	60.03					
28	MON 89034	OSR-1	IL-2	6.30	57.28					
29	MON 89034	OSR-1	IL-2	15.92	144.76					
30	MON 89034	OSR-1	NE	7.00	58.33					
31	MON 89034	OSR-1	NE	5.74	47.86					
32	MON 89034	OSR-1	NE	9.17	76.44	8.1	70			
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Initials_____

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	A	B	C	D	E	F	G	H	I	J
1	**Cry1A.105 Protein Levels in Overseason Root Tissues**									
2	Study# 06-01-52-18									
3										
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**			
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IA-1	7.02	63.82					
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IA-1	5.31	48.27					
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IA-1	6.80	61.79					
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IA-2	4.42	31.56					
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IA-2	5.48	39.14					
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IA-2	5.30	37.83					
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IL-1	5.92	45.53					
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IL-1	6.13	47.15					
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IL-1	7.13	54.88					
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IL-2	6.65	44.30					
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IL-2	6.53	43.54					
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IL-2	8.67	57.77					
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	NE	6.32	52.66					
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	NE	4.38	36.52	6.1	47			
19	MON 89034	OSR-2	IA-1	4.13	37.57					
20	MON 89034	OSR-2	IA-1	6.18	56.15					
21	MON 89034	OSR-2	IA-1	8.86	80.56					
22	MON 89034	OSR-2	IA-2	4.37	31.20					
23	MON 89034	OSR-2	IA-2	5.14	36.72					
24	MON 89034	OSR-2	IL-1	5.68	43.66					
25	MON 89034	OSR-2	IL-1	6.67	51.33					
26	MON 89034	OSR-2	IL-1	6.87	52.88					
27	MON 89034	OSR-2	IL-2	7.10	47.35					
28	MON 89034	OSR-2	IL-2	5.43	36.18					
29	MON 89034	OSR-2	NE	5.17	43.06					
30	MON 89034	OSR-2	NE	6.35	52.96					
31	MON 89034	OSR-2	NE	5.55	46.23	6.0	47			
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	A	B	C	D	E	F	G	H	I	J
1	**Cry1A.105 Protein Levels in Overseason Root Tissues**									
2	Study# 06-01-52-18									
3										
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**			
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IA-1	3.18	15.14					
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IA-1	3.60	17.16					
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IA-1	2.78	13.21					
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IA-2	2.95	15.54					
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IA-2	2.17	11.44					
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IA-2	2.71	14.25					
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IL-1	3.77	18.87					
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IL-1	4.36	21.82					
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IL-1	4.40	21.98					
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IL-2	4.82	30.11					
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IL-2	3.13	19.54					
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IL-2	4.22	26.35					
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	NE	6.35	28.86					
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	NE	5.52	25.09					
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	NE	6.51	29.59	4.0	21			
20	MON 89034	OSR-3	IA-1	3.24	15.41					
21	MON 89034	OSR-3	IA-1	3.52	16.77					
22	MON 89034	OSR-3	IA-1	3.90	18.58					
23	MON 89034	OSR-3	IA-2	3.32	17.48					
24	MON 89034	OSR-3	IA-2	2.96	15.59					
25	MON 89034	OSR-3	IA-2	2.77	14.56					
26	MON 89034	OSR-3	IL-1	3.98	19.91					
27	MON 89034	OSR-3	IL-1	4.22	21.09					
28	MON 89034	OSR-3	IL-1	3.75	18.74					
29	MON 89034	OSR-3	IL-2	5.51	34.45					
30	MON 89034	OSR-3	IL-2	4.72	29.51					
31	MON 89034	OSR-3	NE	4.11	18.69					
32	MON 89034	OSR-3	NE	3.91	17.78					
33	MON 89034	OSR-3	NE	4.89	22.24	3.9	20			
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	A	B	C	D	E	F	G	H	I	J
1	**Cry1A.105 Protein Levels in Overseason Whole Plant Tissues**									
2	Study# 06-01-52-18									
3										
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**			
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IA-1	8.33	69.42					
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IA-1	8.18	68.13					
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IA-1	10.28	85.67					
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IA-2	6.16	47.38					
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IA-2	9.33	71.73					
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IA-2	8.04	61.85					
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IL-1	4.01	44.56					
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IL-1	2.85	31.61					
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IL-1	4.20	46.67					
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IL-2	4.67	42.41					
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IL-2	3.62	32.91					
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IL-2	6.28	57.09					
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	NE	4.05	33.75					
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	NE	7.82	65.13					
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	NE	4.50	37.50	6.2	53			
20	MON 89034	OSWP-1	IA-1	7.89	65.75					
21	MON 89034	OSWP-1	IA-1	7.07	58.92					
22	MON 89034	OSWP-1	IA-1	7.51	62.58					
23	MON 89034	OSWP-1	IA-2	7.68	59.08					
24	MON 89034	OSWP-1	IA-2	5.62	43.19					
25	MON 89034	OSWP-1	IA-2	3.44	26.42					
26	MON 89034	OSWP-1	IL-1	3.38	37.56					
27	MON 89034	OSWP-1	IL-1	1.88	20.91					
28	MON 89034	OSWP-1	IL-1	3.28	36.44					
29	MON 89034	OSWP-1	IL-2	4.92	44.68					
30	MON 89034	OSWP-1	IL-2	4.77	43.32					
31	MON 89034	OSWP-1	NE	4.00	33.29					
32	MON 89034	OSWP-1	NE	3.79	31.58					
33	MON 89034	OSWP-1	NE	3.81	31.75	4.9	43			
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Initials_____

Date _____

	A	B	C	D	E	F	G	H	I	J
1	**Cry1A.105 Protein Levels in Overseason Whole Plant Tissues**									
2	Study# 06-01-52-18									
3										
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**			
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IA-1	8.08	25.23					
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IA-1	7.53	23.52					
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IA-1	8.18	25.55					
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IA-2	5.21	19.30					
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IA-2	5.39	19.96					
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IA-2	7.11	26.33					
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IL-1	2.35	8.09					
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IL-1	4.49	15.47					
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IL-1	5.16	17.79					
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IL-2	5.75	15.97					
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IL-2	5.24	14.54					
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IL-2	8.67	24.07					
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	NE	4.04	14.94					
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	NE	4.48	16.59					
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	NE	4.01	14.85	5.7	19			
20	MON 89034	OSWP-2	IA-1	6.23	19.47					
21	MON 89034	OSWP-2	IA-1	8.72	27.23					
22	MON 89034	OSWP-2	IA-1	4.82	15.05					
23	MON 89034	OSWP-2	IA-2	7.88	29.17					
24	MON 89034	OSWP-2	IA-2	5.86	21.69					
25	MON 89034	OSWP-2	IA-2	8.47	31.37					
26	MON 89034	OSWP-2	IL-1	1.99	6.86					
27	MON 89034	OSWP-2	IL-1	4.22	14.53					
28	MON 89034	OSWP-2	IL-1	3.29	11.34					
29	MON 89034	OSWP-2	IL-2	5.07	14.07					
30	MON 89034	OSWP-2	IL-2	5.04	14.00					
31	MON 89034	OSWP-2	NE	5.34	19.78					
32	MON 89034	OSWP-2	NE	2.61	9.67					
33	MON 89034	OSWP-2	NE	3.12	11.54	5.2	18			
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Initials_____

Date _____

	A	B	C	D	E	F	G	H	I	J
1	**Cry1A.105 Protein Levels in Overseason Whole Plant Tissues**									
2	Study# 06-01-52-18									
3										
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**			
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IA-1	8.98	20.88					
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IA-1	6.28	14.59					
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IA-1	5.82	13.52					
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IA-2	9.35	18.69					
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IA-2	9.81	19.62					
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IA-2	5.13	10.26					
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IL-1	2.14	3.81					
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IL-1	3.14	5.61					
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IL-1	6.18	11.04					
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IL-2	6.69	10.97					
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IL-2	4.15	6.80					
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IL-2	3.20	5.24					
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	NE	4.52	9.21					
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	NE	2.72	5.54					
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	NE	2.64	5.39	5.4	11			
20	MON 89034	OSWP-3	IA-1	3.27	7.59					
21	MON 89034	OSWP-3	IA-1	7.40	17.20					
22	MON 89034	OSWP-3	IA-1	9.62	22.37					
23	MON 89034	OSWP-3	IA-2	4.53	9.06					
24	MON 89034	OSWP-3	IA-2	7.58	15.15					
25	MON 89034	OSWP-3	IA-2	3.73	7.46					
26	MON 89034	OSWP-3	IL-1	3.63	6.47					
27	MON 89034	OSWP-3	IL-1	4.40	7.85					
28	MON 89034	OSWP-3	IL-1	3.20	5.71					
29	MON 89034	OSWP-3	IL-2	3.15	5.16					
30	MON 89034	OSWP-3	IL-2	3.18	5.21					
31	MON 89034	OSWP-3	NE	2.41	4.92					
32	MON 89034	OSWP-3	NE	2.48	5.06					
33	MON 89034	OSWP-3	NE	1.92	3.91	4.3	8.8			
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	A	B	C	D	E	F	G	H	I	J
1	**Cry1A.105 Protein Levels in Grain Tissues**									
2	Study# 06-01-52-18									
3										
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**			
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IA-1	3.93	4.42					
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IA-1	3.92	4.40					
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IA-1	4.11	4.62					
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IA-2	3.08	3.54					
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IA-2	3.30	3.79					
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IA-2	3.71	4.26					
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IL-1	4.30	4.83					
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IL-1	3.01	3.38					
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IL-1	3.50	3.93					
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IL-2	3.87	4.40					
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IL-2	3.83	4.36					
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IL-2	3.93	4.46					
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	NE	4.04	4.64					
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	NE	3.54	4.07					
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	NE	4.23	4.86	3.8	4.3			
20	MON 89034	Grain	IA-1	2.51	2.82					
21	MON 89034	Grain	IA-1	2.43	2.73					
22	MON 89034	Grain	IA-1	3.12	3.51					
23	MON 89034	Grain	IA-2	2.54	2.92					
24	MON 89034	Grain	IA-2	2.37	2.72					
25	MON 89034	Grain	IA-2	2.23	2.56					
26	MON 89034	Grain	IL-1	1.55	1.74					
27	MON 89034	Grain	IL-1	2.79	3.13					
28	MON 89034	Grain	IL-1	2.63	2.95					
29	MON 89034	Grain	IL-2	2.37	2.69					
30	MON 89034	Grain	IL-2	2.39	2.71					
31	MON 89034	Grain	NE	2.37	2.72					
32	MON 89034	Grain	NE	2.71	3.12					
33	MON 89034	Grain	NE	2.68	3.08	2.5	2.8			
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	A	B	C	D	E	F	G	H	I	J
1	**Cry1A.105 Protein Levels in Pollen Tissues**									
2	Study# 06-01-52-18									
3										
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**			
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IA-1	7.64	14.41					
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IA-1	7.20	13.58					
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IA-1	7.67	14.47					
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IA-2	10.38	14.42					
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IA-2	10.39	14.43					
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IA-2	10.57	14.68					
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IL-1	15.27	18.85					
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IL-1	13.77	16.99					
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IL-1	11.06	13.65					
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IL-2	9.56	18.75					
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IL-2	7.35	14.40					
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IL-2	6.64	13.01					
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	NE	6.57	10.10					
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	NE	6.96	10.71					
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	NE	5.07	7.79	9.1	14			
20	MON 89034	Pollen	IA-1	3.05	5.75					
21	MON 89034	Pollen	IA-1	3.08	5.80					
22	MON 89034	Pollen	IA-1	3.36	6.33					
23	MON 89034	Pollen	IA-2	7.89	10.95					
24	MON 89034	Pollen	IA-2	5.11	7.09					
25	MON 89034	Pollen	IA-2	8.38	11.64					
26	MON 89034	Pollen	IL-1	5.54	6.84					
27	MON 89034	Pollen	IL-1	5.15	6.35					
28	MON 89034	Pollen	IL-1	6.19	7.64					
29	MON 89034	Pollen	IL-2	2.61	5.11					
30	MON 89034	Pollen	IL-2	2.80	5.49					
31	MON 89034	Pollen	NE	3.75	5.77					
32	MON 89034	Pollen	NE	5.30	8.15					
33	MON 89034	Pollen	NE	4.09	6.29	4.7	7.1			
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	A	B	C	D	E	F	G	H	I	J
1	**Cry2Ab2 Protein Levels in Overseason Leaf Tissues**									
2	Study# 06-01-52-18									
3										
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**			
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IA-1	30.02	200.13					
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IA-1	28.32	188.80					
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IA-1	25.82	172.13					
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IA-2	25.12	147.76					
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IA-2	26.24	154.35					
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IA-2	25.52	150.12					
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IL-1	30.36	189.75					
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IL-1	23.00	143.75					
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IL-1	25.96	162.25					
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IL-2	43.18	269.88					
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IL-2	34.14	213.38					
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IL-2	45.86	286.63					
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	NE	52.68	351.20					
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	NE	47.48	316.53					
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	NE	44.74	298.27	34	220			
20	MON 89034	OSL-1	IA-1	23.78	158.53					
21	MON 89034	OSL-1	IA-1	24.70	164.67					
22	MON 89034	OSL-1	IA-1	32.78	218.53					
23	MON 89034	OSL-1	IA-2	27.40	161.18					
24	MON 89034	OSL-1	IA-2	25.96	152.71					
25	MON 89034	OSL-1	IA-2	23.16	136.24					
26	MON 89034	OSL-1	IL-1	31.38	196.13					
27	MON 89034	OSL-1	IL-1	27.42	171.38					
28	MON 89034	OSL-1	IL-1	31.58	197.38					
29	MON 89034	OSL-1	IL-2	44.70	279.38					
30	MON 89034	OSL-1	IL-2	43.12	269.50					
31	MON 89034	OSL-1	NE	44.04	293.60					
32	MON 89034	OSL-1	NE	38.46	256.40					
33	MON 89034	OSL-1	NE	37.50	250.00	33	210			
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	A	B	C	D	E	F	G	H	I	J
1	**Cry2Ab2 Protein Levels in Overseason Leaf Tissues**									
2	Study# 06-01-52-18									
3										
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**			
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IA-1	37.54	178.76					
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IA-1	26.60	126.67					
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IA-1	24.64	117.33					
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IA-2	24.72	123.60					
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IA-2	21.58	107.90					
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IA-2	27.50	137.50					
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IL-1	25.40	120.95					
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IL-1	21.40	101.90					
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IL-1	20.94	99.71					
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IL-2	38.72	184.38					
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IL-2	41.26	196.48					
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IL-2	40.54	193.05					
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	NE	32.76	204.75					
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	NE	30.06	187.88					
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	NE	9.66	60.38	28	140			
20	MON 89034	OSL-2	IA-1	19.84	94.48					
21	MON 89034	OSL-2	IA-1	25.38	120.86					
22	MON 89034	OSL-2	IA-1	26.44	125.90					
23	MON 89034	OSL-2	IA-2	24.62	123.10					
24	MON 89034	OSL-2	IA-2	23.74	118.70					
25	MON 89034	OSL-2	IL-1	20.60	98.10					
26	MON 89034	OSL-2	IL-1	20.68	98.48					
27	MON 89034	OSL-2	IL-1	27.70	131.90					
28	MON 89034	OSL-2	IL-2	28.76	136.95					
29	MON 89034	OSL-2	IL-2	69.32	330.10					
30	MON 89034	OSL-2	NE	22.02	137.63					
31	MON 89034	OSL-2	NE	12.14	75.88					
32	MON 89034	OSL-2	NE	28.96	181.00	27	140			
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	A	B	C	D	E	F	G	H	I	J
1	**Cry2Ab2 Protein Levels in Overseason Leaf Tissues**									
2	Study# 06-01-52-18									
3										
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**			
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IA-1	58.34	216.07					
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IA-1	59.98	222.15					
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IA-1	54.22	200.81					
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IA-2	60.22	207.66					
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IA-2	50.92	175.59					
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IA-2	50.40	173.79					
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IL-1	47.56	198.17					
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IL-1	36.42	151.75					
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IL-1	37.08	154.50					
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IL-2	47.20	205.22					
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IL-2	39.42	171.39					
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IL-2	44.36	192.87					
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	NE	40.30	138.97					
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	NE	45.26	156.07					
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	NE	47.82	164.90	48	180			
20	MON 89034	OSL-3	IA-1	55.44	205.33					
21	MON 89034	OSL-3	IA-1	49.50	183.33					
22	MON 89034	OSL-3	IA-1	40.24	149.04					
23	MON 89034	OSL-3	IA-2	59.76	206.07					
24	MON 89034	OSL-3	IA-2	55.34	190.83					
25	MON 89034	OSL-3	IA-2	33.72	116.28					
26	MON 89034	OSL-3	IL-1	43.32	180.50					
27	MON 89034	OSL-3	IL-1	42.60	177.50					
28	MON 89034	OSL-3	IL-1	47.28	197.00					
29	MON 89034	OSL-3	IL-2	38.80	168.70					
30	MON 89034	OSL-3	IL-2	54.12	235.30					
31	MON 89034	OSL-3	NE	50.72	174.90					
32	MON 89034	OSL-3	NE	53.04	182.90					
33	MON 89034	OSL-3	NE	53.58	184.76	48	180			
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	A	B	C	D	E	F	G	H	I	J
1	**Cry2Ab2 Protein Levels in Overseason Root Tissues**									
2	Study# 06-01-52-18									
3										
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**			
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IA-1	8.37	76.05					
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IA-1	6.30	57.27					
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IA-1	6.27	56.95					
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IA-2	6.93	57.75					
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IA-2	6.47	53.90					
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IA-2	7.24	60.35					
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IL-1	7.95	66.23					
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IL-1	8.71	72.60					
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IL-1	5.99	49.94					
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IL-2	7.55	68.64					
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IL-2	3.74	34.00					
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IL-2	4.07	37.00					
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	NE	3.88	32.33					
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	NE	6.04	50.35					
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	NE	3.93	32.75	6.2	54			
20	MON 89034	OSR-1	IA-1	5.77	52.45					
21	MON 89034	OSR-1	IA-1	6.67	60.59					
22	MON 89034	OSR-1	IA-1	8.80	80.02					
23	MON 89034	OSR-1	IA-2	6.11	50.88					
24	MON 89034	OSR-1	IA-2	8.54	71.13					
25	MON 89034	OSR-1	IA-2	3.35	27.90					
26	MON 89034	OSR-1	IL-1	4.53	37.71					
27	MON 89034	OSR-1	IL-1	5.76	47.98					
28	MON 89034	OSR-1	IL-2	6.04	54.93					
29	MON 89034	OSR-1	IL-2	4.40	39.95					
30	MON 89034	OSR-1	NE	4.43	36.88					
31	MON 89034	OSR-1	NE	4.63	38.54					
32	MON 89034	OSR-1	NE	5.37	44.71	5.7	50			
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Initials_____

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	A	B	C	D	E	F	G	H	I	J
1	**Cry2Ab2 Protein Levels in Overseason Root Tissues**									
2	Study# 06-01-52-18									
3										
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**			
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IA-1	9.81	89.14					
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IA-1	4.72	42.93					
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IA-1	5.03	45.73					
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IA-2	7.02	50.13					
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IA-2	5.11	36.46					
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IA-2	4.93	35.21					
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IL-1	5.33	41.00					
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IL-1	3.40	26.17					
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IL-1	7.71	59.29					
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IL-2	10.64	70.93					
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IL-2	12.56	83.73					
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IL-2	17.66	117.70					
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	NE	6.32	52.67					
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	NE	8.06	67.13	7.7	58			
19	MON 89034	OSR-2	IA-1	2.89	26.23					
20	MON 89034	OSR-2	IA-1	11.90	108.18					
21	MON 89034	OSR-2	IA-1	11.18	101.66					
22	MON 89034	OSR-2	IA-2	6.18	44.11					
23	MON 89034	OSR-2	IA-2	4.33	30.93					
24	MON 89034	OSR-2	IL-1	2.91	22.37					
25	MON 89034	OSR-2	IL-1	4.10	31.50					
26	MON 89034	OSR-2	IL-1	8.16	62.73					
27	MON 89034	OSR-2	IL-2	9.76	65.03					
28	MON 89034	OSR-2	IL-2	12.23	81.52					
29	MON 89034	OSR-2	NE	12.80	106.65					
30	MON 89034	OSR-2	NE	14.45	120.42					
31	MON 89034	OSR-2	NE	10.90	90.85	8.6	69			
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	A	B	C	D	E	F	G	H	I	J
1	**Cry2Ab2 Protein Levels in Overseason Root Tissues**									
2	Study# 06-01-52-18									
3										
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**			
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IA-1	1.13	5.38					
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IA-1	1.07	5.08					
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IA-1	0.85	4.06					
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IA-2	3.76	19.80					
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IA-2	1.48	7.79					
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IA-2	1.74	9.15					
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IL-1	2.56	12.78					
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IL-1	3.96	19.80					
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IL-1	4.99	24.95					
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IL-2	2.25	14.03					
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IL-2	1.98	12.35					
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IL-2	4.74	29.59					
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	NE	2.12	9.63					
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	NE	9.44	42.89					
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	NE	10.71	48.66	3.5	18			
20	MON 89034	OSR-3	IA-1	0.85	4.02					
21	MON 89034	OSR-3	IA-1	1.41	6.69					
22	MON 89034	OSR-3	IA-1	1.38	6.57					
23	MON 89034	OSR-3	IA-2	0.87	4.55					
24	MON 89034	OSR-3	IA-2	2.61	13.74					
25	MON 89034	OSR-3	IA-2	1.95	10.25					
26	MON 89034	OSR-3	IL-1	2.00	9.98					
27	MON 89034	OSR-3	IL-1	2.44	12.21					
28	MON 89034	OSR-3	IL-1	3.54	17.71					
29	MON 89034	OSR-3	IL-2	5.46	34.13					
30	MON 89034	OSR-3	IL-2	1.21	7.56					
31	MON 89034	OSR-3	NE	2.89	13.13					
32	MON 89034	OSR-3	NE	8.87	40.31					
33	MON 89034	OSR-3	NE	8.06	36.61	3.1	16			
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	A	B	C	D	E	F	G	H	I	J
1	**Cry2Ab2 Protein Levels in Overseason Whole Plant Tissues**									
2	Study# 06-01-52-18									
3										
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**			
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IA-1	8.47	70.58					
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IA-1	7.58	63.17					
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IA-1	9.64	80.33					
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IA-2	7.82	60.15					
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IA-2	3.57	27.46					
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IA-2	2.96	22.77					
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IL-1	2.49	27.64					
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IL-1	1.85	20.56					
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IL-1	4.19	46.56					
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IL-2	6.98	63.45					
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IL-2	7.06	64.18					
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IL-2	8.61	78.27					
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	NE	5.78	48.17					
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	NE	7.37	61.42					
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	NE	6.54	54.50	6.1	53			
20	MON 89034	OSWP-1	IA-1	11.64	97.00					
21	MON 89034	OSWP-1	IA-1	5.55	46.25					
22	MON 89034	OSWP-1	IA-1	4.58	38.17					
23	MON 89034	OSWP-1	IA-2	4.31	33.15					
24	MON 89034	OSWP-1	IA-2	4.76	36.62					
25	MON 89034	OSWP-1	IA-2	3.06	23.54					
26	MON 89034	OSWP-1	IL-1	5.53	61.44					
27	MON 89034	OSWP-1	IL-1	5.28	58.67					
28	MON 89034	OSWP-1	IL-1	1.89	21.00					
29	MON 89034	OSWP-1	IL-2	9.65	87.73					
30	MON 89034	OSWP-1	IL-2	13.75	125.00					
31	MON 89034	OSWP-1	NE	5.26	43.83					
32	MON 89034	OSWP-1	NE	4.99	41.58					
33	MON 89034	OSWP-1	NE	4.84	40.33	6.1	54			
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	A	B	C	D	E	F	G	H	I	J
1	**Cry2Ab2 Protein Levels in Overseason Whole Plant Tissues**									
2	Study# 06-01-52-18									
3										
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**			
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IA-1	8.61	26.91					
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IA-1	13.84	43.25					
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IA-1	13.30	41.56					
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IA-2	5.62	20.81					
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IA-2	7.95	29.44					
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IA-2	5.28	19.56					
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IL-1	6.39	22.03					
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IL-1	3.20	11.03					
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IL-1	8.83	30.45					
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IL-2	19.16	53.22					
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IL-2	14.25	39.58					
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IL-2	7.69	21.36					
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	NE	10.28	38.07					
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	NE	5.48	20.30					
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	NE	6.47	23.96	9.1	29			
20	MON 89034	OSWP-2	IA-1	14.79	46.22					
21	MON 89034	OSWP-2	IA-1	9.95	31.09					
22	MON 89034	OSWP-2	IA-1	8.39	26.22					
23	MON 89034	OSWP-2	IA-2	8.09	29.96					
24	MON 89034	OSWP-2	IA-2	14.59	54.04					
25	MON 89034	OSWP-2	IA-2	7.83	29.00					
26	MON 89034	OSWP-2	IL-1	3.47	11.97					
27	MON 89034	OSWP-2	IL-1	6.51	22.45					
28	MON 89034	OSWP-2	IL-1	5.36	18.48					
29	MON 89034	OSWP-2	IL-2	6.18	17.17					
30	MON 89034	OSWP-2	IL-2	10.54	29.28					
31	MON 89034	OSWP-2	NE	10.67	39.52					
32	MON 89034	OSWP-2	NE	4.56	16.89					
33	MON 89034	OSWP-2	NE	9.82	36.37	8.6	29			
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	A	B	C	D	E	F	G	H	I	J
1	**Cry2Ab2 Protein Levels in Overseason Whole Plant Tissues**									
2	Study# 06-01-52-18									
3										
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**			
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IA-1	15.81	36.77					
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IA-1	10.07	23.42					
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IA-1	17.59	40.91					
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IA-2	14.41	28.82					
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IA-2	10.24	20.48					
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IA-2	11.48	22.96					
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IL-1	4.62	8.25					
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IL-1	2.51	4.48					
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IL-1	3.00	5.36					
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IL-2	10.91	17.89					
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IL-2	4.81	7.89					
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IL-2	3.05	5.00					
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	NE	3.89	7.94					
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	NE	3.81	7.78					
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	NE	2.44	4.98	7.9	16			
20	MON 89034	OSWP-3	IA-1	7.47	17.37					
21	MON 89034	OSWP-3	IA-1	9.13	21.23					
22	MON 89034	OSWP-3	IA-1	16.48	38.33					
23	MON 89034	OSWP-3	IA-2	9.43	18.86					
24	MON 89034	OSWP-3	IA-2	12.99	25.98					
25	MON 89034	OSWP-3	IA-2	9.73	19.46					
26	MON 89034	OSWP-3	IL-1	6.34	11.32					
27	MON 89034	OSWP-3	IL-1	4.30	7.68					
28	MON 89034	OSWP-3	IL-1	5.23	9.34					
29	MON 89034	OSWP-3	IL-2	7.14	11.70					
30	MON 89034	OSWP-3	IL-2	3.05	5.00					
31	MON 89034	OSWP-3	IL-2	10.23	16.77					
32	MON 89034	OSWP-3	NE	1.78	3.64					
33	MON 89034	OSWP-3	NE	6.49	13.24					
34	MON 89034	OSWP-3	NE	2.10	4.29	7.3	15			
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	A	B	C	D	E	F	G	H	I	J
1	**Cry2Ab2 Protein Levels in Grain Tissues**									
2	Study# 06-01-52-18									
3										
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**			
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IA-1	5.83	6.55					
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IA-1	6.68	7.50					
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IA-1	4.66	5.23					
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IA-2	4.64	5.33					
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IA-2	5.10	5.87					
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IA-2	6.23	7.17					
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IL-1	5.69	6.39					
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IL-1	4.33	4.86					
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IL-1	4.89	5.50					
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IL-2	3.63	4.12					
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IL-2	3.77	4.29					
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IL-2	4.82	5.47					
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	NE	4.77	5.48					
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	NE	5.33	6.13					
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	NE	5.02	5.77	5.0	5.7			
20	MON 89034	Grain	IA-1	6.35	7.13					
21	MON 89034	Grain	IA-1	5.07	5.70					
22	MON 89034	Grain	IA-1	5.70	6.40					
23	MON 89034	Grain	IA-2	5.85	6.72					
24	MON 89034	Grain	IA-2	5.40	6.20					
25	MON 89034	Grain	IA-2	4.58	5.27					
26	MON 89034	Grain	IL-1	5.28	5.93					
27	MON 89034	Grain	IL-1	5.69	6.39					
28	MON 89034	Grain	IL-1	4.05	NA					
29	MON 89034	Grain	IL-2	2.38	2.70					
30	MON 89034	Grain	IL-2	3.82	4.34					
31	MON 89034	Grain	NE	4.37	5.03					
32	MON 89034	Grain	NE	5.05	5.80					
33	MON 89034	Grain	NE	4.75	5.46	4.9	5.6			
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	A	B	C	D	E	F	G	H	I	J
1	**Cry2Ab2 Protein Levels in Pollen Tissues**									
2	Study# 06-01-52-18									
3										
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**			
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IA-1	0.31	0.58					
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IA-1	0.24	0.45					
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IA-1	0.29	0.54					
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IA-2	0.72	1.00					
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IA-2	0.52	0.72					
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IA-2	0.62	0.86					
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IL-1	0.84	1.04					
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IL-1	1.84	2.27					
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IL-1	1.30	1.61					
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IL-2	0.49	0.97					
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IL-2	0.25	0.49					
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IL-2	0.31	0.60					
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	NE	0.12	0.18					
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	NE	0.26	0.41					
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	NE	0.25	0.38	0.56	0.81			
20	MON 89034	Pollen	IA-1	0.31	0.58					
21	MON 89034	Pollen	IA-1	0.25	0.48					
22	MON 89034	Pollen	IA-1	0.29	0.55					
23	MON 89034	Pollen	IA-2	0.75	1.04					
24	MON 89034	Pollen	IA-2	0.58	0.81					
25	MON 89034	Pollen	IA-2	0.53	0.74					
26	MON 89034	Pollen	IL-1	0.65	0.81					
27	MON 89034	Pollen	IL-1	0.82	1.01					
28	MON 89034	Pollen	IL-1	1.80	2.22					
29	MON 89034	Pollen	IL-2	0.25	0.49					
30	MON 89034	Pollen	IL-2	0.25	0.49					
31	MON 89034	Pollen	IL-2	0.16	0.31					
32	MON 89034	Pollen	NE	0.36	0.55					
33	MON 89034	Pollen	NE	0.23	0.36					
34	MON 89034	Pollen	NE	0.18	0.27	0.53	0.76			
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Date _____

	A	B	C	D	E	F	G	H	I	J
1	**Cry3Bb1 Protein Levels in Overseason Leaf Tissues**									
2	Study# 06-01-52-18									
3										
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**			
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IA-1	50.66	337.73					
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IA-1	47.70	318.00					
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IA-1	52.10	347.33					
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IA-2	25.22	148.35					
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IA-2	52.72	310.12					
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IA-2	31.59	185.82					
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IL-1	28.27	176.69					
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IL-1	25.61	160.06					
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IL-1	25.37	158.56					
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IL-2	32.57	203.56					
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IL-2	70.61	441.31					
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IL-2	66.12	413.25					
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	NE	66.23	441.53					
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	NE	73.14	487.60					
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	NE	73.32	488.80	48	310			
20	MON 88017	OSL-1	IA-1	56.27	375.13					
21	MON 88017	OSL-1	IA-1	31.78	211.87					
22	MON 88017	OSL-1	IA-1	61.61	410.73					
23	MON 88017	OSL-1	IA-2	23.33	137.24					
24	MON 88017	OSL-1	IA-2	35.07	206.29					
25	MON 88017	OSL-1	IA-2	43.33	254.88					
26	MON 88017	OSL-1	IL-1	31.19	194.94					
27	MON 88017	OSL-1	IL-1	27.12	169.50					
28	MON 88017	OSL-1	IL-1	24.90	155.63					
29	MON 88017	OSL-1	IL-2	68.54	428.38					
30	MON 88017	OSL-1	IL-2	70.06	437.88					
31	MON 88017	OSL-1	NE	87.24	581.60					
32	MON 88017	OSL-1	NE	76.63	510.87					
33	MON 88017	OSL-1	NE	76.66	511.07	51	330			
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	A	B	C	D	E	F	G	H	I	J
1	**Cry3Bb1 Protein Levels in Overseason Leaf Tissues**									
2	Study# 06-01-52-18									
3										
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**			
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IA-1	28.47	135.57					
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IA-1	29.01	138.14					
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IA-1	27.23	129.67					
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IA-2	23.97	119.85					
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IA-2	21.91	109.55					
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IA-2	17.92	89.60					
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IL-1	26.12	124.38					
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IL-1	22.60	107.62					
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IL-1	21.14	100.67					
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IL-2	24.20	115.24					
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IL-2	28.23	134.43					
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IL-2	26.93	128.24					
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	NE	24.89	155.56					
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	NE	22.74	142.13					
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	NE	25.41	158.81	25	130			
20	MON 88107	OSL-2	IA-1	40.49	192.81					
21	MON 88017	OSL-2	IA-1	28.63	136.33					
22	MON 88017	OSL-2	IA-1	24.76	117.90					
23	MON 88017	OSL-2	IA-2	18.98	94.90					
24	MON 88017	OSL-2	IA-2	17.91	89.55					
25	MON 88017	OSL-2	IA-2	25.12	125.60					
26	MON 88017	OSL-2	IL-1	20.07	95.57					
27	MON 88017	OSL-2	IL-1	16.97	80.81					
28	MON 88017	OSL-2	IL-1	17.98	85.62					
29	MON 88017	OSL-2	IL-2	23.84	113.52					
30	MON 88017	OSL-2	IL-2	29.01	138.14					
31	MON 88017	OSL-2	NE	8.47	52.94					
32	MON 88017	OSL-2	NE	20.54	128.38					
33	MON 88107	OSL-2	NE	22.89	143.06	23	110			
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	A	B	C	D	E	F	G	H	I	J
1	**Cry3Bb1 Protein Levels in Overseason Leaf Tissues**									
2	Study# 06-01-52-18									
3										
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**			
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IA-1	91.67	339.52					
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IA-1	46.45	172.04					
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IA-1	44.30	164.07					
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IA-2	34.30	118.28					
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IA-2	41.03	141.48					
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IA-2	88.90	306.55					
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IL-1	34.41	143.38					
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IL-1	28.75	119.79					
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IL-1	36.73	153.04					
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IL-2	22.51	97.87					
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IL-2	46.11	200.48					
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IL-2	47.21	205.26					
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	NE	32.75	112.93					
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	NE	40.76	140.55					
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	NE	41.15	141.90	45	170			
20	MON 88107	OSL-3	IA-1	43.51	161.15					
21	MON 88017	OSL-3	IA-1	33.74	124.96					
22	MON 88017	OSL-3	IA-1	40.22	148.96					
23	MON 88017	OSL-3	IA-2	46.18	159.24					
24	MON 88017	OSL-3	IA-2	36.81	126.93					
25	MON 88017	OSL-3	IA-2	38.91	134.17					
26	MON 88017	OSL-3	IL-1	29.11	121.29					
27	MON 88017	OSL-3	IL-1	47.43	197.63					
28	MON 88017	OSL-3	IL-1	32.07	133.63					
29	MON 88017	OSL-3	IL-2	38.12	165.74					
30	MON 88017	OSL-3	IL-2	38.04	165.39					
31	MON 88017	OSL-3	NE	33.00	113.79					
32	MON 88017	OSL-3	NE	29.96	103.31					
33	MON 88017	OSL-3	NE	41.17	141.97	38	140			
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	A	B	C	D	E	F	G	H	I	J
1	**Cry3Bb1 Protein Levels in Overseason Root Tissues**									
2	Study# 06-01-52-18									
3										
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**			
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IA-1	24.37	221.55					
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IA-1	26.24	238.50					
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IA-1	22.85	207.68					
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IA-2	14.84	123.67					
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IA-2	15.58	129.83					
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IA-2	19.55	162.88					
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IL-1	13.05	108.75					
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IL-1	11.39	94.88					
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IL-1	13.64	113.63					
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IL-2	15.70	142.73					
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IL-2	13.23	120.23					
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IL-2	15.53	141.14					
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	NE	26.54	221.13					
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	NE	30.88	257.33					
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	NE	19.70	164.17	19	160			
20	MON 88017	OSR-1	IA-1	20.78	188.91					
21	MON 88017	OSR-1	IA-1	19.55	177.68					
22	MON 88017	OSR-1	IA-1	19.78	179.77					
23	MON 88017	OSR-1	IA-2	20.57	171.42					
24	MON 88017	OSR-1	IA-2	17.22	143.46					
25	MON 88017	OSR-1	IA-2	17.53	146.08					
26	MON 88017	OSR-1	IL-1	14.51	120.92					
27	MON 88017	OSR-1	IL-1	12.46	103.79					
28	MON 88017	OSR-1	IL-1	14.15	117.88					
29	MON 88017	OSR-1	IL-2	17.56	159.59					
30	MON 88017	OSR-1	IL-2	14.64	133.05					
31	MON 88017	OSR-1	NE	15.45	128.71					
32	MON 88017	OSR-1	NE	13.59	113.21					
33	MON 88017	OSR-1	NE	9.75	81.25	16	140			
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	A	B	C	D	E	F	G	H	I	J
1	**Cry3Bb1 Protein Levels in Overseason Root Tissues**									
2	Study# 06-01-52-18									
3										
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**			
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IA-1	16.76	152.32					
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IA-1	13.09	118.95					
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IA-1	11.80	107.23					
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IA-2	8.82	63.00					
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IA-2	9.13	65.18					
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IA-2	10.38	74.11					
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IL-1	13.79	106.08					
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IL-1	9.76	75.08					
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IL-1	15.24	117.23					
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IL-2	10.96	73.03					
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IL-2	23.29	155.27					
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IL-2	23.31	155.37					
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	NE	16.31	135.88					
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	NE	17.48	145.67	14	110			
19	MON 88017	OSR-2	IA-1	15.66	142.36					
20	MON 88017	OSR-2	IA-1	16.26	147.77					
21	MON 88017	OSR-2	IA-1	14.72	133.82					
22	MON 88017	OSR-2	IA-2	9.94	70.96					
23	MON 88017	OSR-2	IA-2	13.94	99.57					
24	MON 88017	OSR-2	IA-2	12.64	90.25					
25	MON 88017	OSR-2	IL-1	11.56	88.88					
26	MON 88017	OSR-2	IL-1	11.78	90.62					
27	MON 88017	OSR-2	IL-1	10.81	83.15					
28	MON 88017	OSR-2	IL-2	21.11	140.73					
29	MON 88017	OSR-2	IL-2	25.57	170.47					
30	MON 88017	OSR-2	NE	18.96	157.96					
31	MON 88017	OSR-2	NE	20.63	171.88					
32	MON 88017	OSR-2	NE	16.56	138.00	16	120			
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	A	B	C	D	E	F	G	H	I	J
1	**Cry3Bb1 Protein Levels in Overseason Root Tissues**									
2	Study# 06-01-52-18									
3										
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**			
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IA-1	21.96	104.57					
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IA-1	21.73	103.45					
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IA-1	15.47	73.64					
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IA-2	4.32	22.74					
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IA-2	6.36	33.45					
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IA-2	7.28	38.29					
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IL-1	8.73	43.65					
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IL-1	10.41	52.03					
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IL-1	10.94	54.70					
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IL-2	12.60	78.72					
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IL-2	14.75	92.16					
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IL-2	14.47	90.41					
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	NE	13.12	59.64					
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	NE	12.75	57.95					
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	NE	16.11	73.20	13	65			
20	MON 88017	OSR-3	IA-1	13.26	63.12					
21	MON 88017	OSR-3	IA-1	7.68	36.55					
22	MON 88017	OSR-3	IA-1	9.58	45.60					
23	MON 88017	OSR-3	IA-2	7.10	37.34					
24	MON 88017	OSR-3	IA-2	7.70	40.53					
25	MON 88017	OSR-3	IA-2	10.78	56.71					
26	MON 88017	OSR-3	IL-1	6.41	32.05					
27	MON 88017	OSR-3	IL-1	9.70	48.50					
28	MON 88017	OSR-3	IL-1	11.02	55.10					
29	MON 88017	OSR-3	IL-2	18.84	117.72					
30	MON 88017	OSR-3	IL-2	7.79	48.69					
31	MON 88017	OSR-3	NE	9.09	41.30					
32	MON 88017	OSR-3	NE	8.77	39.86					
33	MON 88017	OSR-3	NE	7.44	33.80	9.7	50			
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	A	B	C	D	E	F	G	H	I	J
1	**Cry3Bb1 Protein Levels in Overseason Whole Plant Tissues**									
2	Study# 06-01-52-18									
3										
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**			
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IA-1	23.76	197.96					
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IA-1	21.84	182.00					
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IA-1	26.12	217.63					
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IA-2	9.48	72.92					
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IA-2	18.06	138.88					
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IA-2	17.24	132.62					
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IL-1	9.14	101.50					
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IL-1	8.05	89.39					
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IL-1	10.26	114.00					
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IL-2	12.00	109.09					
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IL-2	14.23	129.36					
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IL-2	11.34	103.05					
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	NE	14.73	122.71					
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	NE	17.09	142.42					
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	NE	17.94	149.46	15	130			
20	MON 88017	OSWP-1	IA-1	23.16	193.00					
21	MON 88017	OSWP-1	IA-1	11.75	97.88					
22	MON 88017	OSWP-1	IA-1	13.69	114.04					
23	MON 88017	OSWP-1	IA-2	9.30	71.50					
24	MON 88017	OSWP-1	IA-2	10.34	79.54					
25	MON 88017	OSWP-1	IA-2	12.99	99.92					
26	MON 88017	OSWP-1	IL-1	9.15	101.67					
27	MON 88017	OSWP-1	IL-1	7.74	85.94					
28	MON 88017	OSWP-1	IL-1	6.27	69.61					
29	MON 88017	OSWP-1	IL-2	10.02	91.09					
30	MON 88017	OSWP-1	IL-2	18.91	171.86					
31	MON 88017	OSWP-1	NE	18.02	150.13					
32	MON 88017	OSWP-1	NE	8.74	72.79					
33	MON 88017	OSWP-1	NE	11.00	91.67	12	110			
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Initials_____

Date _____

	A	B	C	D	E	F	G	H	I	J
1	**Cry3Bb1 Protein Levels in Overseason Whole Plant Tissues**									
2	Study# 06-01-52-18									
3										
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**			
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IA-1	20.85	65.16					
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IA-1	25.27	78.97					
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IA-1	18.78	58.67					
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IA-2	15.00	55.56					
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IA-2	10.91	40.39					
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IA-2	20.49	75.87					
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IL-1	9.90	34.12					
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IL-1	9.67	33.33					
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IL-1	12.26	42.26					
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IL-2	13.17	36.57					
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IL-2	14.81	41.13					
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IL-2	16.95	47.07					
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	NE	6.58	24.37					
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	NE	10.26	38.00					
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	NE	11.98	44.37	14	48			
20	MON 88017	OSWP-2	IA-1	19.40	60.63					
21	MON 88017	OSWP-2	IA-1	17.66	55.19					
22	MON 88017	OSWP-2	IA-1	14.86	46.44					
23	MON 88017	OSWP-2	IA-2	12.98	48.06					
24	MON 88017	OSWP-2	IA-2	12.46	46.13					
25	MON 88017	OSWP-2	IA-2	15.60	57.76					
26	MON 88017	OSWP-2	IL-1	7.97	27.47					
27	MON 88017	OSWP-2	IL-1	11.21	38.64					
28	MON 88017	OSWP-2	IL-1	7.65	26.38					
29	MON 88017	OSWP-2	IL-2	16.83	46.75					
30	MON 88017	OSWP-2	IL-2	10.70	29.72					
31	MON 88017	OSWP-2	NE	6.64	24.59					
32	MON 88017	OSWP-2	NE	5.79	21.43					
33	MON 88017	OSWP-2	NE	6.56	24.28	12	40			
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	A	B	C	D	E	F	G	H	I	J
1	**Cry3Bb1 Protein Levels in Overseason Whole Plant Tissues**									
2	Study# 06-01-52-18									
3										
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**			
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IA-1	12.80	29.77					
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IA-1	11.01	25.59					
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IA-1	18.85	43.83					
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IA-2	24.65	49.30					
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IA-2	21.61	43.21					
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IA-2	13.04	26.08					
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IL-1	10.04	17.93					
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IL-1	4.97	8.87					
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IL-1	9.93	17.72					
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IL-2	16.58	27.18					
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IL-2	14.22	23.30					
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IL-2	11.35	18.61					
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	NE	8.02	16.36					
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	NE	6.16	12.57					
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	NE	5.67	11.56	13	25			
20	MON 88017	OSWP-3	IA-1	13.78	32.05					
21	MON 88017	OSWP-3	IA-1	25.05	58.26					
22	MON 88017	OSWP-3	IA-1	15.92	37.02					
23	MON 88017	OSWP-3	IA-2	24.25	48.49					
24	MON 88017	OSWP-3	IA-2	21.28	42.55					
25	MON 88017	OSWP-3	IA-2	11.31	22.61					
26	MON 88017	OSWP-3	IL-1	6.23	11.12					
27	MON 88017	OSWP-3	IL-1	8.06	14.39					
28	MON 88017	OSWP-3	IL-1	4.92	8.79					
29	MON 88017	OSWP-3	IL-2	6.20	10.16					
30	MON 88017	OSWP-3	IL-2	11.22	18.39					
31	MON 88017	OSWP-3	NE	7.45	15.20					
32	MON 88017	OSWP-3	NE	6.76	13.80					
33	MON 88017	OSWP-3	NE	3.41	6.95	12	24			
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	A	B	C	D	E	F	G	H	I	J
1	**Cry3Bb1 Protein Levels in Grain Tissues**									
2	Study# 06-01-52-18									
3										
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**			
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IA-1	14.65	16.46					
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IA-1	15.90	17.87					
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IA-1	13.39	15.04					
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IA-2	13.96	16.05					
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IA-2	21.14	24.29					
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IA-2	12.66	14.55					
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IL-1	13.60	15.28					
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IL-1	11.87	13.33					
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IL-1	17.49	19.65					
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IL-2	18.23	20.72					
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IL-2	21.12	24.00					
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IL-2	22.54	25.61					
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	NE	18.22	20.95					
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	NE	11.36	13.06					
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	NE	9.06	10.41	16	18			
20	MON 88017	Grain	IA-1	20.26	22.76					
21	MON 88017	Grain	IA-1	15.05	16.91					
22	MON 88017	Grain	IA-1	17.91	20.12					
23	MON 88017	Grain	IA-2	14.91	17.14					
24	MON 88017	Grain	IA-2	13.45	15.46					
25	MON 88017	Grain	IA-2	10.17	11.69					
26	MON 88017	Grain	IL-1	18.38	20.65					
27	MON 88017	Grain	IL-1	20.90	23.49					
28	MON 88017	Grain	IL-1	15.65	17.58					
29	MON 88017	Grain	IL-2	33.75	38.35					
30	MON 88017	Grain	IL-2	25.22	28.66					
31	MON 88017	Grain	NE	11.15	12.82					
32	MON 88017	Grain	NE	14.06	16.16					
33	MON 88017	Grain	NE	14.05	16.15	17	20			
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	A	B	C	D	E	F	G	H	I	J
1	**Cry3Bb1 Protein Levels in Pollen Tissues**									
2	Study# 06-01-52-18									
3										
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**			
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IA-1	5.81	10.96					
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IA-1	7.76	14.64					
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IA-1	9.89	18.66					
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IA-2	8.57	11.90					
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IA-2	10.36	14.38					
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IA-2	9.09	12.63					
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IL-1	10.64	13.14					
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IL-1	19.43	23.99					
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IL-1	16.86	20.81					
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IL-2	8.86	17.36					
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IL-2	9.85	19.30					
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IL-2	7.96	15.61					
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	NE	4.91	7.55					
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	NE	9.07	13.95					
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	NE	5.38	8.28	9.6	15			
20	MON 88017	Pollen	IA-1	5.09	9.60					
21	MON 88017	Pollen	IA-1	4.28	8.07					
22	MON 88017	Pollen	IA-1	6.08	11.47					
23	MON 88017	Pollen	IA-2	7.34	10.19					
24	MON 88017	Pollen	IA-2	9.69	13.46					
25	MON 88017	Pollen	IA-2	9.92	13.78					
26	MON 88017	Pollen	IL-1	9.59	11.83					
27	MON 88017	Pollen	IL-1	12.50	15.43					
28	MON 88017	Pollen	IL-1	12.59	15.54					
29	MON 88017	Pollen	IL-2	7.68	15.06					
30	MON 88017	Pollen	IL-2	6.92	13.57					
31	MON 88017	Pollen	NE	7.88	12.12					
32	MON 88017	Pollen	NE	5.50	8.46					
33	MON 88017	Pollen	NE	9.43	14.50	8.2	12			
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	A	B	C	D	E	F	G
1	**CP4 EPSPS Protein Levels in Overseason Leaf Tissues**						
2	Study# 06-01-52-18						
3							
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IA-1	36.11	240.73		
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IA-1	34.30	228.67		
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IA-1	40.52	270.13		
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IA-2	19.18	112.82		
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IA-2	27.69	162.88		
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IA-2	26.11	153.59		
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IL-1	19.46	121.63		
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IL-1	22.62	141.38		
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IL-1	20.41	127.56		
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IL-2	38.67	241.69		
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IL-2	33.75	210.94		
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	IL-2	34.39	214.94		
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	NE	28.34	188.93		
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	NE	29.99	199.93		
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-1	NE	29.87	199.13	29	190
20	MON 88017	OSL-1	IA-1	35.57	237.13		
21	MON 88017	OSL-1	IA-1	26.28	175.20		
22	MON 88017	OSL-1	IA-1	32.82	218.80		
23	MON 88017	OSL-1	IA-2	23.39	137.59		
24	MON 88017	OSL-1	IA-2	23.44	137.88		
25	MON 88017	OSL-1	IA-2	24.59	144.65		
26	MON 88017	OSL-1	IL-1	24.66	154.13		
27	MON 88017	OSL-1	IL-1	23.63	147.69		
28	MON 88017	OSL-1	IL-1	13.16	82.25		
29	MON 88017	OSL-1	IL-2	26.33	164.56		
30	MON 88017	OSL-1	IL-2	37.63	235.19		
31	MON 88017	OSL-1	NE	27.62	184.13		
32	MON 88017	OSL-1	NE	23.25	155.00		
33	MON 88017	OSL-1	NE	29.93	199.53	27	170

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	A	B	C	D	E	F	G
1	**CP4 EPSPS Protein Levels in Overseason Leaf Tissues**						
2	Study# 06-01-52-18						
3							
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IA-1	31.42	149.62		
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IA-1	32.51	154.81		
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IA-1	34.10	162.38		
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IA-2	16.00	80.00		
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IA-2	21.59	107.95		
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IA-2	18.75	93.75		
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IL-1	42.20	200.95		
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IL-1	20.09	95.67		
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IL-1	19.15	91.19		
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IL-2	33.42	159.14		
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IL-2	34.23	163.00		
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	IL-2	31.17	148.43		
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	NE	25.44	159.00		
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	NE	25.66	160.38		
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-2	NE	27.89	174.31	28	140
20	MON 88107	OSL-2	IA-1	13.70	65.24		
21	MON 88017	OSL-2	IA-1	21.30	101.43		
22	MON 88017	OSL-2	IA-1	29.27	139.38		
23	MON 88017	OSL-2	IA-2	21.01	105.05		
24	MON 88017	OSL-2	IA-2	19.42	97.10		
25	MON 88017	OSL-2	IA-2	33.86	169.30		
26	MON 88017	OSL-2	IL-1	19.39	92.33		
27	MON 88017	OSL-2	IL-1	25.43	121.10		
28	MON 88017	OSL-2	IL-1	26.25	125.00		
29	MON 88017	OSL-2	IL-2	26.93	128.24		
30	MON 88017	OSL-2	IL-2	35.17	167.48		
31	MON 88017	OSL-2	NE	18.56	116.00		
32	MON 88017	OSL-2	NE	15.48	96.75		
33	MON 88107	OSL-2	NE	17.87	111.69	23	120

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1	**CP4 EPSPS Protein Levels in Overseason Leaf Tissues**						
2	Study# 06-01-52-18						
3							
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IA-1	43.02	159.33		
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IA-1	38.94	144.22		
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IA-1	39.64	146.81		
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IA-2	53.59	184.79		
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IA-2	51.35	177.07		
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IA-2	50.51	174.17		
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IL-1	33.41	139.21		
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IL-1	34.24	142.67		
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IL-1	33.89	141.21		
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IL-2	25.08	109.04		
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IL-2	41.20	179.13		
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	IL-2	38.64	168.00		
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	NE	46.76	161.24		
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	NE	46.60	160.69		
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSL-3	NE	52.81	182.10	42	160
20	MON 88107	OSL-3	IA-1	46.34	171.63		
21	MON 88017	OSL-3	IA-1	42.94	159.04		
22	MON 88017	OSL-3	IA-1	42.20	156.30		
23	MON 88017	OSL-3	IA-2	61.49	212.03		
24	MON 88017	OSL-3	IA-2	68.79	237.21		
25	MON 88017	OSL-3	IA-2	47.69	164.45		
26	MON 88017	OSL-3	IL-1	35.50	147.92		
27	MON 88017	OSL-3	IL-1	35.95	149.79		
28	MON 88017	OSL-3	IL-1	44.23	184.29		
29	MON 88017	OSL-3	IL-2	34.61	150.48		
30	MON 88017	OSL-3	IL-2	32.78	142.52		
31	MON 88017	OSL-3	NE	61.96	213.66		
32	MON 88017	OSL-3	NE	61.44	211.86		
33	MON 88017	OSL-3	NE	63.89	220.31	49	180

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Date _____

	A	B	C	D	E	F	G
1	**CP4 EPSPS Protein Levels in Overseason Root Tissues**						
2	Study# 06-01-52-18						
3							
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IA-1	12.45	113.18		
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IA-1	11.57	105.18		
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IA-1	12.56	114.16		
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IA-2	11.77	98.06		
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IA-2	12.19	101.56		
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IA-2	13.56	112.98		
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IL-1	13.53	112.75		
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IL-1	11.57	96.42		
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IL-1	13.21	110.08		
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IL-2	8.80	80.00		
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IL-2	8.23	74.80		
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	IL-2	10.18	92.57		
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	NE	8.57	71.44		
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	NE	13.05	108.77		
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-1	NE	11.48	95.69	12	99
20	MON 88017	OSR-1	IA-1	12.59	114.48		
21	MON 88017	OSR-1	IA-1	10.59	96.30		
22	MON 88017	OSR-1	IA-1	11.81	107.39		
23	MON 88017	OSR-1	IA-2	14.77	123.06		
24	MON 88017	OSR-1	IA-2	11.73	97.71		
25	MON 88017	OSR-1	IA-2	14.27	118.94		
26	MON 88017	OSR-1	IL-1	12.09	100.71		
27	MON 88017	OSR-1	IL-1	10.54	87.79		
28	MON 88017	OSR-1	IL-1	11.11	92.54		
29	MON 88017	OSR-1	IL-2	10.00	90.93		
30	MON 88017	OSR-1	IL-2	8.27	75.14		
31	MON 88017	OSR-1	NE	8.24	68.67		
32	MON 88017	OSR-1	NE	6.90	57.52		
33	MON 88017	OSR-1	NE	7.65	63.75	11	92

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	A	B	C	D	E	F	G
1	**CP4 EPSPS Protein Levels in Overseason Root Tissues**						
2	Study# 06-01-52-18						
3							
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IA-1	10.82	98.34		
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IA-1	8.15	74.09		
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IA-1	9.92	90.18		
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IA-2	5.83	41.64		
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IA-2	6.83	48.80		
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IA-2	6.10	43.59		
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IL-1	7.25	55.73		
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IL-1	7.07	54.38		
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IL-1	7.96	61.23		
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IL-2	8.92	59.47		
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IL-2	12.37	82.43		
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	IL-2	21.41	142.72		
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	NE	8.98	74.81		
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-2	NE	9.48	79.02	9.4	72
19	MON 88017	OSR-2	IA-1	9.53	86.66		
20	MON 88017	OSR-2	IA-1	9.95	90.45		
21	MON 88017	OSR-2	IA-1	9.40	85.48		
22	MON 88017	OSR-2	IA-2	7.76	55.43		
23	MON 88017	OSR-2	IA-2	6.71	47.95		
24	MON 88017	OSR-2	IA-2	7.83	55.93		
25	MON 88017	OSR-2	IL-1	5.41	41.58		
26	MON 88017	OSR-2	IL-1	8.81	67.73		
27	MON 88017	OSR-2	IL-1	9.39	72.25		
28	MON 88017	OSR-2	IL-2	14.27	95.13		
29	MON 88017	OSR-2	IL-2	18.69	124.62		
30	MON 88017	OSR-2	NE	10.72	89.31		
31	MON 88017	OSR-2	NE	8.63	71.94		
32	MON 88017	OSR-2	NE	11.50	95.85	9.9	77

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	A	B	C	D	E	F	G
1	**CP4 EPSPS Protein Levels in Overseason Root Tissues**						
2	Study# 06-01-52-18						
3							
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IA-1	6.60	31.42		
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IA-1	6.65	31.64		
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IA-1	5.65	26.90		
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IA-2	5.24	27.57		
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IA-2	4.67	24.57		
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IA-2	5.90	31.07		
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IL-1	6.20	31.00		
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IL-1	7.22	36.11		
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IL-1	6.43	32.16		
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IL-2	7.05	44.08		
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IL-2	6.77	42.30		
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	IL-2	6.59	41.17		
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	NE	10.00	45.43		
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	NE	8.09	36.78		
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSR-3	NE	11.01	50.02	6.9	35
20	MON 88017	OSR-3	IA-1	7.65	36.40		
21	MON 88017	OSR-3	IA-1	6.40	30.48		
22	MON 88017	OSR-3	IA-1	5.92	28.19		
23	MON 88017	OSR-3	IA-2	3.93	20.67		
24	MON 88017	OSR-3	IA-2	5.22	27.45		
25	MON 88017	OSR-3	IA-2	6.08	31.97		
26	MON 88017	OSR-3	IL-1	6.84	34.20		
27	MON 88017	OSR-3	IL-1	5.92	29.61		
28	MON 88017	OSR-3	IL-1	6.01	30.05		
29	MON 88017	OSR-3	IL-2	9.31	58.16		
30	MON 88017	OSR-3	IL-2	6.09	38.08		
31	MON 88017	OSR-3	NE	9.46	43.01		
32	MON 88017	OSR-3	NE	7.76	35.27		
33	MON 88017	OSR-3	NE	7.68	34.90	6.7	34
34							

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	A	B	C	D	E	F	G
1	**CP4 EPSPS Protein Levels in Overseason Whole Plant Tissues**						
2	Study# 06-01-52-18						
3							
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IA-1	11.92	99.33		
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IA-1	11.88	99.00		
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IA-1	13.44	112.00		
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IA-2	9.64	74.15		
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IA-2	12.29	94.54		
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IA-2	10.89	83.77		
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IL-1	6.73	74.78		
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IL-1	6.68	74.22		
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IL-1	6.73	74.78		
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IL-2	8.88	80.73		
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IL-2	9.40	85.45		
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	IL-2	11.38	103.45		
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	NE	8.86	73.79		
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	NE	12.42	103.50		
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-1	NE	13.80	115.00	10	90
20	MON 88017	OSWP-1	IA-1	10.26	85.50		
21	MON 88017	OSWP-1	IA-1	12.78	106.50		
22	MON 88017	OSWP-1	IA-1	7.65	63.75		
23	MON 88017	OSWP-1	IA-2	6.17	47.46		
24	MON 88017	OSWP-1	IA-2	7.04	54.15		
25	MON 88017	OSWP-1	IA-2	8.26	63.54		
26	MON 88017	OSWP-1	IL-1	7.69	85.44		
27	MON 88017	OSWP-1	IL-1	6.42	71.33		
28	MON 88017	OSWP-1	IL-1	5.35	59.44		
29	MON 88017	OSWP-1	IL-2	9.85	89.55		
30	MON 88017	OSWP-1	IL-2	9.49	86.27		
31	MON 88017	OSWP-1	NE	13.25	110.42		
32	MON 88017	OSWP-1	NE	14.25	118.75		
33	MON 88017	OSWP-1	NE	15.78	131.50	9.6	84

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Date _____

	A	B	C	D	E	F	G
1	**CP4 EPSPS Protein Levels in Overseason Whole Plant Tissues**						
2	Study# 06-01-52-18						
3							
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IA-1	13.17	41.16		
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IA-1	16.55	51.72		
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IA-1	10.51	32.84		
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IA-2	13.13	48.63		
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IA-2	10.05	37.22		
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IA-2	13.19	48.85		
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IL-1	8.94	30.83		
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IL-1	11.29	38.93		
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IL-1	9.97	34.38		
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IL-2	17.98	49.94		
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IL-2	10.30	28.61		
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	IL-2	17.48	48.56		
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	NE	11.19	41.44		
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	NE	11.03	40.85		
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-2	NE	13.28	49.19	13	42
20	MON 88017	OSWP-2	IA-1	9.10	28.44		
21	MON 88017	OSWP-2	IA-1	15.16	47.38		
22	MON 88017	OSWP-2	IA-1	9.47	29.59		
23	MON 88017	OSWP-2	IA-2	13.82	51.19		
24	MON 88017	OSWP-2	IA-2	7.92	29.33		
25	MON 88017	OSWP-2	IA-2	10.90	40.37		
26	MON 88017	OSWP-2	IL-1	9.19	31.69		
27	MON 88017	OSWP-2	IL-1	10.97	37.83		
28	MON 88017	OSWP-2	IL-1	12.99	44.79		
29	MON 88017	OSWP-2	IL-2	7.53	20.92		
30	MON 88017	OSWP-2	IL-2	13.89	38.58		
31	MON 88017	OSWP-2	NE	12.70	47.04		
32	MON 88017	OSWP-2	NE	10.67	39.52		
33	MON 88017	OSWP-2	NE	9.55	35.37	11	37

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	A	B	C	D	E	F	G
1	**CP4 EPSPS Protein Levels in Overseason Whole Plant Tissues**						
2	Study# 06-01-52-18						
3							
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IA-1	11.82	27.49		
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IA-1	9.60	22.33		
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IA-1	11.08	25.77		
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IA-2	9.14	18.28		
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IA-2	11.66	23.32		
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IA-2	7.78	15.56		
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IL-1	5.78	10.32		
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IL-1	4.92	8.79		
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IL-1	7.57	13.52		
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IL-2	5.65	9.26		
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IL-2	7.28	11.93		
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	IL-2	7.22	11.84		
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	NE	3.32	6.77		
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	NE	3.62	7.39		
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	OSWP-3	NE	2.52	5.14	7.3	15
20	MON 88017	OSWP-3	IA-1	8.42	19.58		
21	MON 88017	OSWP-3	IA-1	10.64	24.74		
22	MON 88017	OSWP-3	IA-1	6.66	15.49		
23	MON 88017	OSWP-3	IA-2	13.14	26.28		
24	MON 88017	OSWP-3	IA-2	9.28	18.56		
25	MON 88017	OSWP-3	IA-2	8.50	17.00		
26	MON 88017	OSWP-3	IL-1	4.66	8.33		
27	MON 88017	OSWP-3	IL-1	4.44	7.93		
28	MON 88017	OSWP-3	IL-1	4.51	8.06		
29	MON 88017	OSWP-3	IL-2	1.88	3.09		
30	MON 88017	OSWP-3	IL-2	5.62	9.21		
31	MON 88017	OSWP-3	NE	2.54	5.19		
32	MON 88017	OSWP-3	NE	2.20	4.48		
33	MON 88017	OSWP-3	NE	3.30	6.74	6.1	12

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	A	B	C	D	E	F	G
1	**CP4 EPSPS Protein Levels in Grain Tissues**						
2	Study# 06-01-52-18						
3							
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IA-1	5.06	5.69		
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IA-1	4.67	5.25		
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IA-1	3.53	3.97		
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IA-2	3.84	4.41		
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IA-2	3.98	4.58		
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IA-2	4.95	5.69		
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IL-1	5.90	6.63		
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IL-1	6.35	7.13		
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IL-1	5.72	6.42		
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IL-2	5.25	5.96		
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IL-2	5.00	5.68		
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	IL-2	4.40	5.00		
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	NE	3.93	4.52		
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	NE	3.30	3.79		
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Grain	NE	3.06	3.52	4.6	5.2
20	MON 88017	Grain	IA-1	3.46	3.89		
21	MON 88017	Grain	IA-1	3.42	3.84		
22	MON 88017	Grain	IA-1	5.05	5.67		
23	MON 88017	Grain	IA-2	4.70	5.40		
24	MON 88017	Grain	IA-2	5.28	6.07		
25	MON 88017	Grain	IA-2	5.36	6.17		
26	MON 88017	Grain	IL-1	2.96	3.32		
27	MON 88017	Grain	IL-1	6.55	7.36		
28	MON 88017	Grain	IL-1	3.34	3.75		
29	MON 88017	Grain	IL-2	4.07	4.62		
30	MON 88017	Grain	IL-2	4.83	5.49		
31	MON 88017	Grain	NE	3.58	4.11		
32	MON 88017	Grain	NE	3.84	4.41		
33	MON 88017	Grain	NE	4.02	4.63	4.3	4.9

Initials_____

Date _____

	A	B	C	D	E	F	G
1	**CP4 EPSPS Protein Levels in Pollen Tissues**						
2	Study# 06-01-52-18						
3							
4	**Line**	**Tissue Type**	**Site**	**µg/g fwt.**	**µg/g dwt.**	**mean µg/g fwt.**	**mean µg/g dwt.**
5	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IA-1	140.85	265.75		
6	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IA-1	150.84	284.59		
7	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IA-1	134.00	252.83		
8	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IA-2	261.34	362.97		
9	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IA-2	230.54	320.19		
10	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IA-2	232.60	323.06		
11	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IL-1	215.80	266.42		
12	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IL-1	192.36	237.48		
13	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IL-1	208.04	256.84		
14	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IL-2	244.80	480.00		
15	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IL-2	210.10	411.96		
16	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	IL-2	236.36	463.45		
17	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	NE	129.07	198.57		
18	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	NE	236.80	364.31		
19	MON 89034 × TC1507 × MON 88017 × DAS-59122-7	Pollen	NE	149.44	229.91	200	310
20	MON 88017	Pollen	IA-1	119.56	225.58		
21	MON 88017	Pollen	IA-1	131.40	247.92		
22	MON 88017	Pollen	IA-1	135.95	256.50		
23	MON 88017	Pollen	IA-2	171.54	238.25		
24	MON 88017	Pollen	IA-2	206.36	286.61		
25	MON 88017	Pollen	IA-2	170.78	237.19		
26	MON 88017	Pollen	IL-1	169.99	209.86		
27	MON 88017	Pollen	IL-1	191.84	236.84		
28	MON 88017	Pollen	IL-2	175.16	343.45		
29	MON 88017	Pollen	IL-2	164.02	321.61		
30	MON 88017	Pollen	NE	195.10	300.15		
31	MON 88017	Pollen	NE	181.04	278.52		
32	MON 88017	Pollen	NE	161.68	248.74	170	260

Initials_____

Date _____