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RESEARCH AND DEVELOPMENT PROJECT REPORT

Evaluate the Efficacy of Albion B5 Compared to Brandt Smart Trio when Applied with Glyphosate for Weed Control and Yield Enhancement on Soybeans under Field Conditions

Trial ID: ALB1501M

Albion, MI – Michigan Ag Research Station

Prepared for:

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May – October, 2015

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ABSTRACT

Objective: Evaluate the efficacy of Albion B5 compared to Brandt Smart Trio when applied with

glyphosate for weed control and yield enhancement on soybeans under field

conditions.

Product(s) tested: Albion B5, Buccaneer Plus, and Brandt Smart Trio

Location: Albion, MI – Michigan Ag Research Station

Project Duration: May 20 (Planting) to October 15 (Harvest), 2015

Key Findings:

• There was a dose response for total weed control in plots treated with Albion B5 at 26 DA-A.

• Weed control was enhanced the least by the addition of Brandt Smart Trio.

 No significant differences in yields were observed among the treated and untreated plots.

Narrative:

The objective of this trial is to determine yield enhancement and weed control efficacy by Albion B5 compared to Brandt Smart Trio fertilizers when applied with glyphosate in AG 2632 soy. Percent control was assessed per plot on a 0-100% scale where 100% indicates a "clean" or weed-free plot. Total weed control as well as individual species were evaluated. Yields were collected mid-October (76 DAB) and moisture adjusted bushels/acre were calculated.

Total weed control was significantly different among treatments, with the Buccaneer plus alone providing 97% control. When applied with Brandt Smart Trio, there was a significant decrease in weed control ratings by 25%. When applied with Albion B5, the 16 fl oz/a rate was only slightly less effective than the 32 fl oz/a rate. Against Lambsquarter, Albion B5 and the Buccaneer alone had no significant differences in control, but when Buccaneer was applied with Brandt Smart Trio, control dipped to 57%. For other species, there were no significant differences in control.

Yield weights were taken 76 DA-B and no significant differences were observed among treatments. Moisture adjusted yields for soybeans and estimated gross return were tabulated. Albion B5 added to Buccaneer numerically improves returns, by \$17 per acre at most.

MATERIALS AND METHODS

Treatments:

This study consisted of four treatments with applications on June 19 (A) and July 31 (B), 2015.

- 1. Buccaneer Plus 32 fl oz/a (A)
- 2. Buccaneer Plus 32 fl oz/a (A) + Brandt Smart Trio 32 fl oz/a (AB)
- 3. Buccaneer Plus -32 fl oz/a (A) + Albion B5 -16 fl oz/a (AB)
- 4. Buccaneer Plus -32 fl oz/a (A) + Albion B5 -32 fl oz/a (AB)

Experimental Unit:

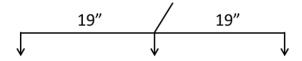
This trial was conducted on AG 2632 variety soybeans that were seeded on May 20, 2015. Plants were spaced 1.5 inches apart and rows were spaced 30 inches apart for a planting density of 140,000 plants per acre. Plots were 10 feet (4 rows) by 40 feet, and treatments were replicated four times in a randomized complete block design for a total experiment size of 6,400 square-feet. The soil at the Michigan Ag Research station had a pH of 6.4, a cation exchange capacity of 5.7 meq/100g soil, and 1.8% organic matter. The soil texture consisted of 59% sand, 28% silt, and 13% clay particles.

Pest Description:

Weeds were naturally occurring in the plots. Weed species observed during the trial were: common lambsquarters (*Chenopodium album*), crab grass (*Digitaria sp.*), wood sorrel (*Oxalis sp.*), foxtail millet (*Setaria sp.*), common ragweed (*Ambrosia artemisiifolia*), and Canada horseweed (*Conyza canadaensis*).

Application Equipment:

Treatments were applied using a CO2 backpack sprayer operating at 25 PSI with a spray volume of 15 gallons per acre and a mix size of 3 liters. The spray boom incorporated three nozzles for a total boom width of 38 inches (see diagram below).



Evaluations:

Weed percent control was evaluated on a 0% to 100% scale where 0% represents a plot full of weeds (no control) and 100% represents a weed-free plot (complete control). Percent control ratings were done on July 5 (26 DA-A), and ratings were done for each of six weed species as well as a total percent control rating per plot.

Plots were harvested on October 15 (76 DA-B), 2015. The yield weight in pounds, percent moisture content, and test weight were recorded for the center two rows of each plot (80 row-ft). The estimated

number of bushels per acre was adjusted to 13% moisture content, and estimated gross returns were calculated using a value of \$9 per bushel.

Trial data was managed using ARM9 software (Gylling Data Management). Statistics were analyzed using ANOVA mean comparison with LSD test and α =0.05.

Table 1. Total Weed Percent Control. Percent control was evaluated on a 0% to 100% scale (0% = no control/plot full of weeds, 100% = no weed presence in plots) on July 5 (26 DA-A), 2015.

	Treatment		07/05/15
#	Name	Rate	26 DA-A
1	Buccaneer Plus	32 fl oz/a (A)	97.50 a
2	Brandt Smart Trio	32 fl oz/a (AB)	72.50 c
	Buccaneer Plus	32 fl oz/a (A)	
3	Albion B5	16 fl oz/a (AB)	83.75 b
	Buccaneer Plus	32 fl oz/a (A)	
4	Albion B5	32 fl oz/a (AB)	87.50 ab
	Buccaneer Plus	32 fl oz/a (A)	

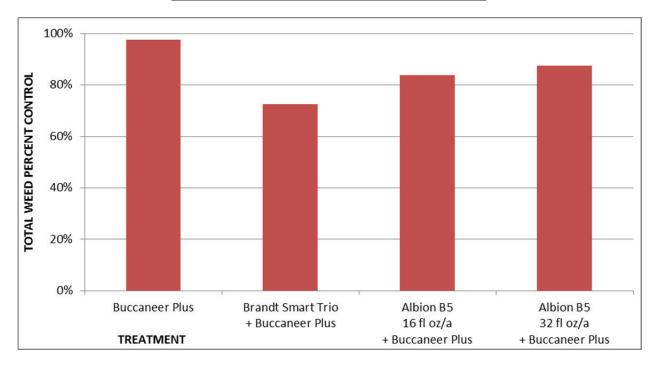


Chart 1. Total Weed Percent Control. Percent control was evaluated on a 0% to 100% scale (0% = no control/plot full of weeds, 100% = no weed presence in plots) on July 5 (26 DA-A), 2015.

Table 2. Common Lambsquarters Percent Control. Percent control of common lambsquarters (*Chenopodium album*) was evaluated on a 0% to 100% scale (0% = no control/plot full of weeds, 100% = no weed presence in plots) on July 5 (26 DA-A), 2015.

	Treatment		07/05/15
#	Name	Rate	26 DA-A
1	Buccaneer Plus	32 fl oz/a (A)	97.50 a
2	Brandt Smart Trio	32 fl oz/a (AB)	57.50 b
	Buccaneer Plus	32 fl oz/a (A)	
3	Albion B5	16 fl oz/a (AB)	95.00 a
	Buccaneer Plus	32 fl oz/a (A)	
4	Albion B5	32 fl oz/a (AB)	87.50 a
	Buccaneer Plus	32 fl oz/a (A)	

Table 3. Crab Grass Percent Control. Percent control of crab grass (*Digitaria sp.*) was evaluated on a 0% to 100% scale (0% = no control/plot full of weeds, 100% = no weed presence in plots) on July 5 (26 DA-A), 2015.

	Treatment		07/05/15
#	Name	Rate	26 DA-A
1	Buccaneer Plus	32 fl oz/a (A)	100.00 a
2	Brandt Smart Trio	32 fl oz/a (AB)	100.00 a
	Buccaneer Plus	32 fl oz/a (A)	
3	Albion B5	16 fl oz/a (AB)	100.00 a
	Buccaneer Plus	32 fl oz/a (A)	
4	Albion B5	32 fl oz/a (AB)	100.00 a
	Buccaneer Plus	32 fl oz/a (A)	

Table 4. Wood Sorrel Percent Control. Percent control of wood sorrel (*Oxalis sp.*) was evaluated on a 0% to 100% scale (0% = no control/plot full of weeds, 100% = no weed presence in plots) on July 5 (26 DA-A), 2015.

Treatment		07/05/15
# Name	Rate	26 DA-A
1 Buccaneer Plus	32 fl oz/a (A)	100.00 a
2 Brandt Smart Trio	32 fl oz/a (AB)	100.00 a
Buccaneer Plus	32 fl oz/a (A)	
3 Albion B5	16 fl oz/a (AB)	100.00 a
Buccaneer Plus	32 fl oz/a (A)	
4 Albion B5	32 fl oz/a (AB)	100.00 a
Buccaneer Plus	32 fl oz/a (A)	

Table 5. Foxtail Millet Percent Control. Percent control of foxtail millet (*Setaria sp.*) was evaluated on a 0% to 100% scale (0% = no control/plot full of weeds, 100% = no weed presence in plots) on July 5 (26 DA-A), 2015.

	Treatment		07/05/15
#	Name	Rate	26 DA-A
1	Buccaneer Plus	32 fl oz/a (A)	100.00 a
2	Brandt Smart Trio	32 fl oz/a (AB)	100.00 a
	Buccaneer Plus	32 fl oz/a (A)	
3	Albion B5	16 fl oz/a (AB)	96.25 a
	Buccaneer Plus	32 fl oz/a (A)	
4	Albion B5	32 fl oz/a (AB)	100.00 a
	Buccaneer Plus	32 fl oz/a (A)	

Table 6. Common Ragweed Percent Control. Percent control of common ragweed (*Ambrosia artemisiifolia*) was evaluated on a 0% to 100% scale (0% = no control/plot full of weeds, 100% = no weed presence in plots) on July 5 (26 DA-A), 2015.

	Treatment		07/05/15
#	Name	Rate	26 DA-A
1	Buccaneer Plus	32 fl oz/a (A)	97.50 a
2	Brandt Smart Trio	32 fl oz/a (AB)	97.50 a
	Buccaneer Plus	32 fl oz/a (A)	
3	Albion B5	16 fl oz/a (AB)	77.50 a
	Buccaneer Plus	32 fl oz/a (A)	
4	Albion B5	32 fl oz/a (AB)	75.00 a
	Buccaneer Plus	32 fl oz/a (A)	

Table 7. Canada Horseweed Percent Control. Percent control of Canada horseweed (*Conyza Canadensis*) was evaluated on a 0% to 100% scale (0% = no control/plot full of weeds, 100% = no weed presence in plots) on July 5 (26 DA-A), 2015.

	Treatment		07/05/15
#	Name	Rate	26 DA-A
1	Buccaneer Plus	32 fl oz/a (A)	100.00 a
2	Brandt Smart Trio	32 fl oz/a (AB)	100.00 a
	Buccaneer Plus	32 fl oz/a (A)	
3	Albion B5	16 fl oz/a (AB)	85.00 a
	Buccaneer Plus	32 fl oz/a (A)	
4	Albion B5	32 fl oz/a (AB)	100.00 a
	Buccaneer Plus	32 fl oz/a (A)	

Table 8. Yield Weight (Lbs). Yield weights (in pounds) were recorded for 80 row-ft per plot on October 15 (76 DA-B), 2015.

	Treatment		10/15/15
#	Name	Rate	76 DA-B
1	Buccaneer Plus	32 fl oz/a (A)	12.10 a
2	Brandt Smart Trio	32 fl oz/a (AB)	12.14 a
	Buccaneer Plus	32 fl oz/a (A)	
3	Albion B5	16 fl oz/a (AB)	12.68 a
	Buccaneer Plus	32 fl oz/a (A)	
4	Albion B5	32 fl oz/a (AB)	11.82 a
	Buccaneer Plus	32 fl oz/a (A)	

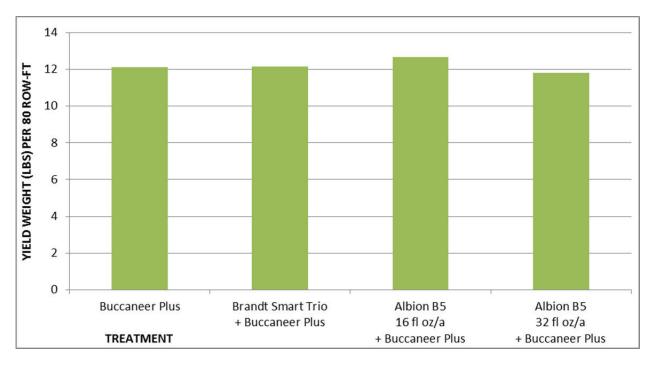


Chart 8. Yield Weight (Lbs). Yield weights (in pounds) were recorded for 80 row-ft per plot on October 15 (76 DA-B), 2015.

Table 9. Moisture Content (%). The moisture content of soybeans at harvest was recorded for each plot on October 15 (76 DA-B), 2015.

Trea	atment		10/15/15
# N	lame	Rate	76 DA-B
1 Buccan	eer Plus	32 fl oz/a (A)	13.48% a
2 Brandt	Smart Trio	32 fl oz/a (AB)	13.58% a
Buccan	eer Plus	32 fl oz/a (A)	
3 Albion	B5	16 fl oz/a (AB)	13.55% a
Buccan	eer Plus	32 fl oz/a (A)	
4 Albion	B5	32 fl oz/a (AB)	13.38% a
Buccan	eer Plus	32 fl oz/a (A)	

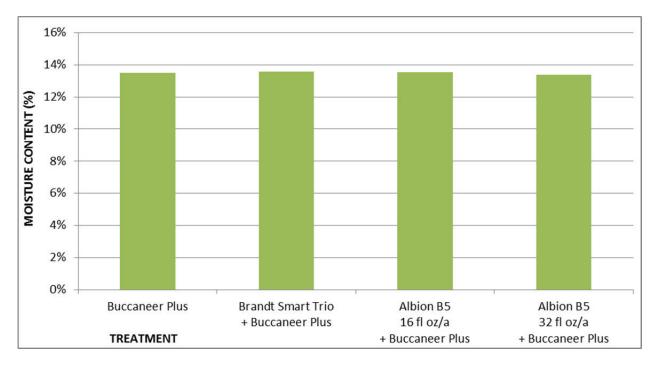


Chart 9. Moisture Content (%). The moisture content of soybeans at harvest was recorded for each plot on October 15 (76 DA-B), 2015.

Chart 10. Test Weight (Lbs/Bushel). The test weight (in pounds/bushel) of soybeans at harvest was recorded for each plot on October 15 (76 DA-B), 2015.

	Treatment		10/15/15
#	Name	Rate	76 DA-B
1 [Buccaneer Plus	32 fl oz/a (A)	60.63 a
2 1	Brandt Smart Trio	32 fl oz/a (AB)	60.05 a
E	Buccaneer Plus	32 fl oz/a (A)	
3 /	Albion B5	16 fl oz/a (AB)	59.93 a
E	Buccaneer Plus	32 fl oz/a (A)	
4 /	Albion B5	32 fl oz/a (AB)	59.68 a
E	Buccaneer Plus	32 fl oz/a (A)	

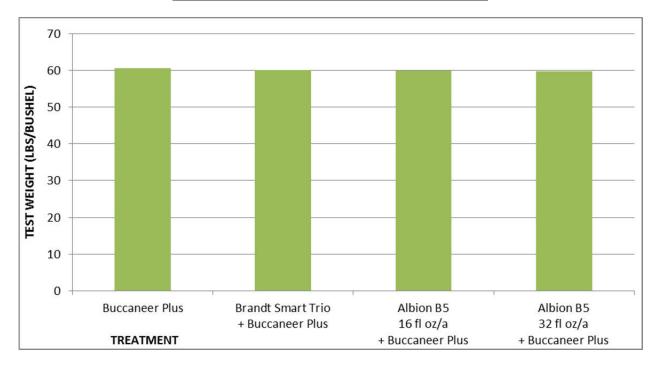


Chart 10. Test Weight (Lbs/Bushel). The test weight (in pounds/bushel) of soybeans at harvest was recorded for each plot on October 15 (76 DA-B), 2015.

Table 11. Moisture-Adjusted Bushels per Acre. An estimate of the number of bushels per acre was adjusted to 13% moisture content for soybeans.

	Treatment		10/15/15
#	Name	Rate	76 DA-B
1	Buccaneer Plus	32 fl oz/a (A)	43.68 a
2	Brandt Smart Trio	32 fl oz/a (AB)	43.77 a
	Buccaneer Plus	32 fl oz/a (A)	
3	Albion B5	16 fl oz/a (AB)	45.72 a
	Buccaneer Plus	32 fl oz/a (A)	
4	Albion B5	32 fl oz/a (AB)	42.70 a
	Buccaneer Plus	32 fl oz/a (A)	

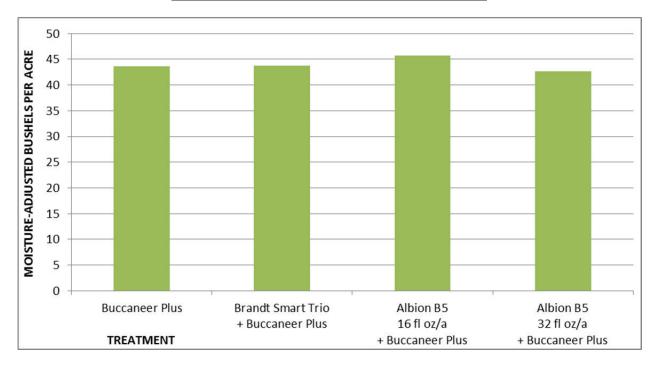


Chart 11. Moisture-Adjusted Bushels per Acre. An estimate of the number of bushels per acre was adjusted to 13% moisture content for soybeans.

Table 12. Estimated Gross Returns (\$/Acre). Estimated gross returns (in dollars per acre) were calculated using a value of \$9 per bushel.

	Treatment		10/15/15
#	Name	Rate	76 DA-B
1	Buccaneer Plus	32 fl oz/a (A)	\$393.09 a
2	Brandt Smart Trio	32 fl oz/a (AB)	\$393.94 a
	Buccaneer Plus	32 fl oz/a (A)	
3	Albion B5	16 fl oz/a (AB)	\$411.45 a
	Buccaneer Plus	32 fl oz/a (A)	
4	Albion B5	32 fl oz/a (AB)	\$384.27 a
	Buccaneer Plus	32 fl oz/a (A)	

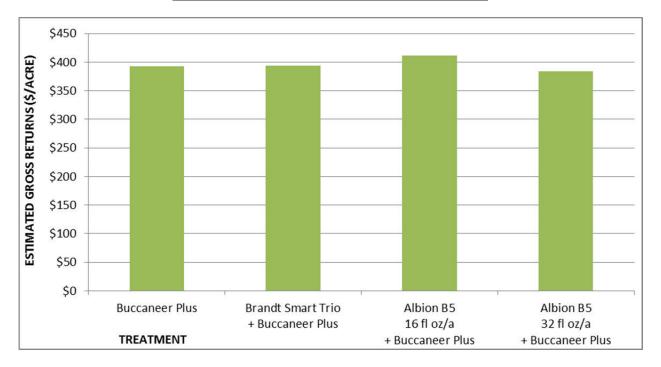


Chart 12. Estimated Gross Returns (\$/Acre). Estimated gross returns (in dollars per acre) were calculated using a value of \$9 per bushel.

TRIAL INFORMATION SHEET

Trial Setup Info:

Trial ID:	ALB1501M	Location:	Albion, MI
Sponsor Protocol ID:	ALB1501M	Study Director:	Brian Cortright
Discipline:	Herbicide	Sponsor Contact:	Jeremy O'Brien
Trial Initiation Date:	05/20/15	Trial Completion Date:	10/15/15

Objective:

Evaluate the efficacy of Albion B5 compared to Brandt Smart Trio when applied with glyphosate for weed control and yield enhancement on soybeans under field conditions.

Crop and Pest Info:

Crop:	Soybean	Pest(s):	Weeds
Variety:	AG 2632	Common Lambsquarters:	Chenopodium album
Planting Date:	05/20/15	Crab Grass:	Digitaria sp.
Planting Method:	Seeded	Wood Sorrel:	Oxalis sp.
Planting Equipment:	JD 7100 Planter	Foxtail Millet:	Setaria sp.
Row Spacing:	30 Inches	Common Ragweed:	Ambrosia artemisiifolia
Spacing Within Rows:	8 plants/ft	Canada Horseweed:	Conyza canadensis
Planting Density:	140,000 Plants/Acre	Harvested Width:	5 Feet (2 Rows)
Harvest Equipment:	HP 5	Harvested Length:	40 Feet

Experiment Site Info:

Site Name:	MAR Station	Soil pH:	6.4
Block:	176	Soil CEC:	5.7 meq/100g soil
Plot Width:	10 Feet (4 Rows)	Soil % OM:	1.8%
Plot Length:	40 Feet	Soil % Sand, Silt, Clay:	59%, 28%, 13%
# Treatments, # Replicates:	4 trts, 4 reps	Irrigation Method:	Rainfall
Tillage Type:	Conventional Till	Statistical Design:	RCB Design

Applications:

Letter and Date:	Method and Placement:	Equipment Notes (Pressure, # Nozzles, Etc.):
A - 06/19/15	Spray, Foliar	Backpack CO2 Sprayer, 3 Nozzle Boom, 25 PSI
B - 07/31/15	Spray, Foliar	Same Equip. as A (15 GPA, 3 L Mix Size)

Evaluations:

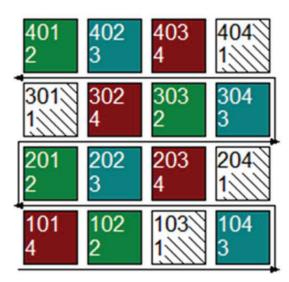
Weed Percent Control:	7/5
Harvest:	10/15

TREATMENT LIST

Reps: 4 Plots: 10 by 40 feet
Spray vol: 30 GAL/AC Mix Size: 2 gallons (calculated mix size 1.3774)

Sp	ray vol: 30 GAL/AC							N	1ix Siz	e: 2 ga	ıllons (calculat	ed m	ix siz	e 1.3	774)
Т	rt Treatment	Form Form	Form		Rate	Appl	Spray	Volume	Mix	Mix	Amt Product		Re	р	
Ν	o. Name	Conc Unit	Туре	Rate	Unit	Code	Volume	Unit	Size	Unit	to Measure	1	2	3	4
	1 Buccaneer Plus	41 %	EC	32	fl oz/a	Α	15	GAL/AC	3	liters	50.0 ml/mx	103	204	301	404
	2 Brandt Smart Trio	10.5 LB/GAL	EC	32	fl oz/a	Α	15	GAL/AC	3	liters	50.0 ml/mx	102	201	303	401
	Buccaneer Plus	41 %	EC	32	fl oz/a	Α	15	GAL/AC	3	liters	50.0 ml/mx				
	Brandt Smart Trio	10.5 LB/GAL	EC	32	fl oz/a	В	15	GAL/AC	3	liters	50.0 ml/mx				
	3 Albion B5	10.5 LB/GAL	EC	16	fl oz/a	Α	15	GAL/AC	3	liters	25.0 ml/mx	104	202	304	402
	Buccaneer Plus	41 %	EC	32	fl oz/a	Α	15	GAL/AC	3	liters	50.0 ml/mx				
L	Albion B5	10.5 LB/GAL	EC	16	fl oz/a	В	15	GAL/AC	3	liters	25.0 ml/mx				
	4 Albion B5	10.5 LB/GAL	EC	32	fl oz/a	Α	15	GAL/AC	3	liters	50.0 ml/mx	101	203	302	403
	Buccaneer Plus	41 %	EC	32	fl oz/a	Α	15	GAL/AC	3	liters	50.0 ml/mx				
	Albion B5	10.5 LB/GAL	EC	32	fl oz/a	В	15	GAL/AC	3	liters	50.0 ml/mx				

PLOT MAP



APPENDIX A: DAILY METEROLOGICAL SUMMARY

Enviro-weather Station: Albion, MI (8.3 Miles from Experiment Site)

		C !	Max	Min	Max	Min	Max	Min	Max
	Precip	Cumul Precip	Air Temp	Air Temp	Rel Hum	Rel Hum	Soil Temp	Soil Temp	Wind Speed
Date	(in)	(in)	(F)	(F)	(%)	(%)	(F)	(F)	(mph)
05/01/15	(/	0.00	74.3	38.8	88.2	22.6	57.6	52.1	15.5
05/02/15		0.00	74.3	39.8	87.2	20.1	59.3	53.7	14.2
05/03/15		0.00	78.2	46.7	75.8	23.6	60.3	55.3	15.9
05/04/15	0.10	0.10	75.9	56.0	92.2	43.4	62.0	58.4	14.9
05/05/15	0.80	0.90	57.6	47.2	94.0	44.8	61.6	57.3	9.5
05/06/15	0.14	1.04	75.5	49.9	95.2	57.0	62.2	56.3	12.2
05/07/15		1.04	84.5	52.5	94.8	30.4	64.7	59.5	12.2
05/08/15	0.48	1.52	82.8	56.8	93.5	41.5	65.4	61.7	16.9
05/09/15	0.03	1.55	77.1	59.3	94.9	59.0	66.2	63.4	13.9
05/10/15	0.41	1.96	74.7	58.3	94.5	66.9	66.5	64.7	11.2
05/11/15	0.06	2.02	73.9	56.9	95.3	61.2	65.9	64.3	11.5
05/12/15		2.02	61.5	47.1	79.0	59.0	65.3	59.3	19.9
05/13/15		2.02	57.3	39.1	84.9	46.5	60.8	57.0	15.9
05/14/15		2.02	61.7		93.1		60.2		12.5
05/15/15	0.08	2.10	76.6	49.0	90.4	57.8	63.0	58.3	11.5
05/16/15	0.04	2.14	77.2	59.7	94.5	59.8	65.9	61.6	8.8
05/17/15		2.14	81.7	62.8	94.1	56.8	68.7	64.0	16.6
05/18/15		2.14	82.3	57.1	89.4	36.3	70.9	66.6	12.5
05/19/15		2.14	57.0	39.1	75.3	46.3	69.6	62.3	17.6
05/20/15		2.14	59.3	33.9	83.2	31.3	62.9	58.5	14.2
05/21/15		2.14	63.6	43.3	87.2	26.5	63.4	59.6	14.5
05/22/15		2.14	69.3	42.1	65.3	19.8	65.5	59.6	15.9
05/23/15		2.14	78.2	38.0	90.7	15.7	67.2	59.9	14.9
05/24/15		2.14	75.9	50.0	84.3	37.2	66.3	62.7	10.8
05/25/15	0.11	2.25	79.5	62.6	90.1	46.5	68.2	64.0	17.9
05/26/15	0.11	2.36	83.6	62.1	93.0	43.5	69.3	65.3	19.9
05/27/15	0.17	2.53	76.6	60.0	90.4	54.4	68.7	66.1	20.9
05/28/15	0.01	2.54	80.7	50.6	95.0	33.5	71.4	64.5	13.2
05/29/15		2.54	84.5	58.4	84.5	44.2	72.8	66.9	11.9
05/30/15	0.93	3.47	75.5	49.6	93.1	64.9	72.0	68.9	19.6
05/31/15	0.99	4.46	52.7	45.2	93.8	72.0	68.9	62.5	23.6
06/01/15		4.46	66.8	42.6	87.5	33.4	65.8	60.5	14.9
06/02/15		4.46	71.8	39.3	94.2	34.1	67.8	60.9	14.2
06/03/15		4.46	74.6	44.2	92.1	46.2	68.5	62.6	10.5
06/04/15		4.46	80.5	55.7	83.2	37.3	71.2	65.3	10.2
06/05/15		4.46	76.6	57.7	93.0	57.4	71.7	67.5	15.9
06/06/15		4.46	76.9	53.0	87.9	35.5	72.5	66.8	15.9
06/07/15	0.22	4.68	78.0	51.7	94.3	63.4	71.4	67.1	17.2
06/08/15	1.17	5.85	78.9	58.8	94.4	55.0	71.3	67.6	15.5

	Precip	Cumul Precip	Max Air Temp	Min Air Temp	Max Rel Hum	Min Rel Hum	Max Soil Temp	Min Soil Temp	Max Wind Speed
Date	(in)	(in)	(F)	(F)	(%)	(%)	(F)	(F)	(mph)
06/09/15	0.01	5.86	76.1	53.2	95.0	44.0	71.9	66.8	11.5
06/10/15		5.86	86.6	60.9	89.2	46.2	74.8	68.7	18.2
06/11/15	0.37	6.23	74.3	62.2	93.0	58.7	74.1	70.9	9.8
06/12/15	0.39	6.62	75.2	58.8	94.1	70.7	71.3	69.0	12.9
06/13/15	0.08	6.70	76.4	58.0	94.9	74.8	71.7	68.4	10.2
06/14/15	2.31	9.01	81.8	66.4	94.6	61.3	73.9	69.9	12.9
06/15/15	0.37	9.38	79.7	69.5	93.8	67.8	74.4	72.1	6.8
06/16/15	0.04	9.42	81.4	62.3	94.2	33.7	77.2	72.2	12.9
06/17/15	0.04	9.46	72.3	60.5	92.9	62.7	76.0	71.9	10.5
06/18/15	0.20	9.66	80.0	65.9	94.3	66.8	74.0	71.5	11.2
06/19/15		9.66	71.8	58.4	89.2	53.7	74.1	70.5	12.9
06/20/15		9.66	78.8	56.5	92.6	66.1	74.2	69.8	9.2
06/21/15		9.66	82.6	63.5	91.1	42.9	75.9	72.0	12.2
06/22/15	0.53	10.19	82.1	61.2	94.1	62.8	74.9	71.6	16.2
06/23/15	0.70	10.89	79.1	61.6	93.3	44.9	76.9	72.3	18.9
06/24/15		10.89	79.2	52.6	95.2	29.8	75.8	71.1	7.5
06/25/15	0.15	11.04	69.6	60.0	92.9	78.1	74.9	71.6	7.2
06/26/15		11.04	74.3	57.8	95.0	52.9	72.6	69.7	10.8
06/27/15	1.01	12.05	64.6	54.0	93.3	62.1	72.0	67.1	18.9
06/28/15		12.05	77.5	54.3	88.6	34.2	71.7	65.2	12.5
06/29/15		12.05	73.1	58.2	89.6	53.4	71.1	68.4	12.5
06/30/15	0.04	12.09	74.6	57.0	93.4	61.1	71.4	68.6	9.5
07/01/15		12.09	71.1	57.1	93.8	45.5	71.8	68.5	10.8
07/02/15		12.09	74.0	51.3	95.0	40.4	72.5	67.6	13.2
07/03/15		12.09	76.2	51.5	93.5	33.6	72.2	67.6	10.5
07/04/15		12.09	79.4	51.3	95.4	34.3	73.3	67.6	8.8
07/05/15		12.09	82.8	54.5	95.1	42.7	74.7	68.9	7.5
07/06/15		12.09	83.7	57.0	94.5	49.9	75.6	70.2	12.5
07/07/15	0.40	12.49	75.1	53.9	94.4	65.5	75.0	72.2	16.6
07/08/15	0.01	12.50	64.5	50.4	94.2	61.3	72.2	68.4	8.8
07/09/15	0.39	12.89	73.0	58.8	94.9	64.6	69.8	67.6	12.2
07/10/15		12.89	81.9	53.4	95.1	43.1	72.0	67.1	7.5
07/11/15		12.89	78.0	57.3	95.1	46.1	72.8	68.7	7.5
07/12/15	0.01	12.90	80.0	64.5	89.4	50.9	74.6	70.6	8.8
07/13/15	0.38	13.28	82.5	59.9	95.1	54.2	74.1	70.2	10.5
07/14/15	0.56	13.84	78.2	64.1	95.0	60.5	73.9	71.6	18.2
07/15/15		13.84	77.1	56.3	88.6	35.3	74.9	70.3	16.2
07/16/15		13.84	73.9	52.4	94.4	50.9	73.8	69.8	9.8
07/17/15	0.66	14.50	88.5	63.2	94.8	59.5	75.5	70.2	11.5

		Cumul	Max Air	Min Air	Max Rel	Min Rel	Max Soil	Min Soil	Max Wind
Date	Precip (in)	Precip (in)	Temp (F)	Temp (F)	Hum (%)	Hum (%)	Temp (F)	Temp (F)	Speed (mph)
07/18/15	0.74	15.24	84.5	66.3	95.1	61.5	75.8	72.9	16.6
07/19/15		15.24	85.1	60.6	94.3	39.8	77.2	73.5	15.2
07/20/15		15.24	82.6	56.1	95.3	46.7	76.5	72.1	12.2
07/21/15		15.24	78.4	58.1	88.9	34.5	77.0	73.5	15.9
07/22/15		15.24	78.7	52.7	95.0	36.6	75.7	71.4	12.5
07/23/15		15.24	84.2	55.8	95.2	36.9	76.1	71.0	9.8
07/24/15		15.24	85.5	58.0	95.3	34.5	77.0	72.1	15.9
07/25/15		15.24	86.1	63.1	94.0	57.0	76.9	73.3	11.9
07/26/15		15.24	84.8	61.9	95.1	39.9	76.9	73.6	8.5
07/27/15		15.24	88.6	61.0	95.2	30.5	77.8	73.4	9.8
07/28/15		15.24	88.5	60.3	95.1	34.9	78.0	73.7	9.2
07/29/15		15.24	86.5	62.7	85.3	37.0	77.9	74.8	12.2
07/30/15		15.24	82.8	58.4	92.4	33.4	76.8	72.9	17.2
07/31/15		15.24	83.9	59.8	91.7	28.3	76.2	72.7	18.6
08/01/15		15.24	81.9	56.2	94.4	30.0	75.4	71.6	17.2
08/02/15	0.58	15.82	89.0	60.2	93.4	34.0	76.9	72.1	22.9
08/03/15	0.08	15.90	79.2	57.7	95.0	31.2	75.9	72.4	15.9
08/04/15		15.90	80.0	53.8	94.1	32.6	74.3	70.4	13.2
08/05/15		15.90	80.4	52.8	95.5	35.7	74.0	69.7	9.5
08/06/15		15.90	79.1	59.7	90.8	36.0	74.4	70.6	10.2
08/07/15		15.90	79.9	54.3	93.8	35.4	73.9	70.1	11.5
08/08/15		15.90	78.7	62.9	82.6	55.5	73.5	71.4	7.8
08/09/15		15.90	82.6	64.7	93.5	63.1	74.2	71.4	8.2
08/10/15	1.30	17.20	77.7	65.0	94.3	67.2	73.8	72.3	11.9
08/11/15		17.20	80.7	61.4	95.3	41.7	74.5	70.9	16.9
08/12/15		17.20	76.8	54.8	92.8	37.2	73.7	70.1	13.5
08/13/15	0.01	17.21	83.2	57.0	95.1	48.1	73.6	69.6	11.9
08/14/15	0.09	17.30	84.8	64.1	92.7	54.0	75.1	71.4	18.9
08/15/15	0.01	17.31	86.9	62.7	93.7	48.0	75.8	71.9	23.3
08/16/15		17.31	87.3	63.8	95.3	51.0	76.5	72.7	9.2
08/17/15	0.01	17.32	85.4	66.3	95.4	55.6	76.0	73.5	11.2
08/18/15		17.32	81.8	63.2	94.9	55.2	75.3	73.1	12.2
08/19/15	0.07	17.39	84.4	67.2	91.7	53.4	75.7	73.3	13.5
08/20/15	0.31	17.70	69.6	56.2	95.0	54.4	75.3	71.2	16.9
08/21/15		17.70	78.1	51.8	95.5	37.4	72.1	68.7	10.8
08/22/15		17.70	80.3	54.5	95.2	39.9	72.1	68.8	10.5
08/23/15	0.32	18.02	79.9	55.5	93.6	56.2	71.5	68.8	14.5
08/24/15		18.02	71.8	52.4	95.6	36.2	70.4	67.2	19.2
08/25/15		18.02	62.5	53.6	91.0	64.9	68.3	66.7	14.9

	Dresin	Cumul	Max Air	Min Air	Max Rel	Min Rel	Max Soil	Min Soil	Max Wind
Date	Precip (in)	Precip (in)	Temp (F)	Temp (F)	Hum (%)	Hum (%)	Temp (F)	Temp (F)	Speed (mph)
08/26/15		18.02	66.5	55.3	93.8	61.0	67.0	65.8	9.8
08/27/15		18.02	66.2	46.6	95.8	58.9	66.8	64.3	6.8
08/28/15		18.02	76.6	50.4	95.8	52.9	67.5	63.6	7.8
08/29/15	0.20	18.22	70.6	58.5	94.8	77.5	67.6	66.1	5.5
08/30/15		18.22	78.9	62.6	95.4	66.4	70.1	67.2	7.5
08/31/15		18.22	83.4	58.0	95.7	55.0	71.4	67.6	10.2
09/01/15		18.22	88.0	61.2	95.6	46.9	72.8	68.5	8.2
09/02/15		18.22	89.4	66.5	95.4	47.4	73.9	70.3	10.8
09/03/15	0.10	18.32	87.2	65.8	95.3	48.8	73.7	71.2	11.2
09/04/15	0.02	18.34	83.5	64.8	95.4	52.1	74.2	71.9	12.9
09/05/15	0.19	18.53	80.9	64.6	95.3	60.3	73.8	71.6	11.2
09/06/15		18.53	89.5	62.0	95.7	39.5	74.6	70.7	8.5
09/07/15	0.01	18.54	89.7	66.6	93.3	42.5	75.2	71.9	10.2
09/08/15	0.11	18.65	86.8	69.4	94.7	50.9	75.4	73.3	11.2
09/09/15	0.01	18.66	75.4	55.6	92.8	53.6	74.9	72.8	9.5
09/10/15		18.66	78.8	50.0	96.0	31.4	72.9	68.7	9.8
09/11/15	0.02	18.68	67.8	53.9	95.9	51.4	70.9	68.5	12.9
09/12/15		18.68	60.6	46.2	93.5	55.2	68.5	65.4	13.5
09/13/15		18.68	68.9	39.4	96.1	34.0	65.5	62.3	15.2
09/14/15		18.68	77.1	42.9	95.6	33.7	65.5	61.2	11.5
09/15/15		18.68	82.4	56.5	84.4	31.4	67.2	63.6	10.2
09/16/15		18.68	83.1	52.0	91.8	29.1	67.6	64.1	12.5
09/17/15		18.68	82.6	52.7	93.7	33.7	68.0	64.3	11.5
09/18/15	0.72	19.40	79.7	62.1	94.8	54.5	69.0	66.2	8.5
09/19/15	0.04	19.44	70.4	50.2	95.1	48.3	69.0	67.2	21.6
09/20/15		19.44	71.4	42.3	95.7	32.1	67.2	63.2	10.5
09/21/15		19.44	74.2	43.1	95.9	33.1	65.0	61.6	11.2
09/22/15		19.44	78.8	43.5	96.0	27.7	65.0	61.1	7.8
09/23/15		19.44	80.1	45.7	95.8	29.9	65.1	61.3	12.2
09/24/15		19.44	78.6	46.8	95.7	38.8	65.1	61.6	9.8
09/25/15		19.44	79.8	53.0	95.2	35.5	66.1	62.7	15.2
09/26/15		19.44	76.0	58.8	91.1	30.0	66.2	64.1	13.9
09/27/15		19.44	77.7	59.5	90.8	49.6	66.7	64.6	11.2
09/28/15		19.44	80.3	63.5	92.3	54.6	68.1	65.9	10.8
09/29/15	0.01	19.45	70.0	52.2	93.8	52.9	67.9	66.2	19.2
09/30/15		19.45	64.6	42.3	90.5	35.1	66.2	62.5	21.3
10/01/15		19.45	61.6	41.2	84.9	32.0	63.3	60.2	22.9
10/02/15		19.45	59.8	43.3	72.5	28.3	61.5	58.9	23.9
10/03/15	0.13	19.58	48.2	43.5	92.1	45.6	59.8	57.4	19.2

Date	Precip (in)	Cumul Precip (in)	Max Air Temp (F)	Min Air Temp (F)	Max Rel Hum (%)	Min Rel Hum (%)	Max Soil Temp (F)	Min Soil Temp (F)	Max Wind Speed (mph)
10/04/15	0.03	19.61	55.8	44.9	95.8	90.2	58.3	56.9	10.8
10/04/15	0.03	19.61	72.3	52.8	95.7	59.2	61.2	58.3	7.8
10/05/15		19.61	67.6	50.9	95.6	65.6	61.8	60.2	8.8
10/00/15		19.61	73.3	47.0	95.8	39.0	62.0	59.3	12.5
10/07/15	0.03	19.64	77.1	45.8	95.2	43.5	62.5	59.2	10.8
10/08/15	0.05	19.70	62.6	41.8	94.6	58.9	62.5	60.5	15.9
10/03/13	0.00	19.70	65.2	36.6	96.0	39.4	60.5	57.0	9.8
10/10/15		19.70	75.4	46.4	80.7	30.2	60.3	56.9	13.5
10/11/15		19.70	73.1	53.1	74.1	48.1	60.5	58.2	13.5
10/12/15	0.01	19.71	60.1	48.6	89.7	54.0	60.2	58.2	17.6
10/13/15	0.01	19.72	58.5	38.6	93.6	44.1	58.2	57.1	14.9
10/15/15	0.06	19.78	58.1	38.2	94.9	44.7	57.1	54.9	24.9
10/16/15	0.01	19.79	52.8	29.9	96.6	38.8	55.1	52.2	18.6
10/17/15	0.01	19.80	48.4	27.6	93.3	28.3	52.5	50.6	18.6
10/18/15		19.80	53.4	26.3	95.5	28.5	51.0	48.4	16.2
10/19/15		19.80	68.4	29.9	91.8	22.0	52.1	48.1	17.2
10/20/15	0.05	19.85	74.5	53.0	93.8	22.9	54.7	51.6	12.9
10/21/15	0.06	19.91	75.3	49.5	94.0	36.3	56.8	54.1	11.5
10/22/15		19.91	67.1	43.1	80.5	31.8	57.5	55.9	10.8
10/23/15		19.91	60.2	39.9	92.5	48.6	56.4	53.6	14.9
10/24/15	0.17	20.08	68.9	50.7	91.0	70.8	57.2	54.8	16.2
10/25/15		20.08	62.7	37.6	93.6	31.1	56.9	54.1	15.5
10/26/15		20.08	64.1	30.9	96.0	31.4	54.7	51.1	11.9
10/27/15	0.02	20.10	58.9	39.9	93.9	38.5	53.3	51.5	16.6
10/28/15	0.60	20.70	58.3	43.3	95.0	84.4	54.6	52.7	18.6
10/29/15	0.05	20.75	43.7	34.9	94.3	67.4	54.4	49.9	15.5
10/30/15	0.01	20.76	50.7	33.0	96.6	64.4	50.6	49.0	5.5
10/31/15	0.17	20.93	49.2	39.4	94.2	67.2	50.4	49.4	13.9
11/01/15	0.11	21.04	62.1	36.4	94.4	33.5	51.7	49.7	19.9
11/02/15		21.04	71.6	36.4	95.5	26.7	52.0	48.7	12.9
11/03/15		21.04	76.9	42.7	94.0	25.5	53.2	49.9	8.8
11/04/15		21.04	75.4	45.8	94.3	41.2	54.3	50.8	9.8
11/05/15	0.21	21.25	71.6	52.5	92.8	52.3	56.1	53.1	18.2
11/06/15	0.19	21.44	65.3	46.4	91.2	67.2	56.7	54.3	25.9
11/07/15		21.44	53.2	30.4	93.0	39.0	54.3	51.3	20.9
11/08/15		21.44	50.7	25.2	96.3	43.4	51.3	48.2	10.5
11/09/15	0.01	21.45	56.4	26.1	95.7	28.7	48.7	46.1	9.5
11/10/15	0.15	21.60	54.6	32.0	94.5	44.2	49.2	47.7	11.2

APPENDIX B: DATA SUMMARIES

Nov-20-2015 (ALB1501M Weed Soybean)

ARM 2014.7 Spray/Seeding Plan Page 1 of 4

Pacific Agricultural Research

Evaluate the efficacy of Albion B5 compared to Brandt Smart Trio when applied with glyphosate for weed control and yield enhancement on soybeans under field conditions.

Trial ID: ALB1501M Location: Albion, MI Trial Year: 2015

Protocol ID: ALB1501M Investigator: Brian Cortright
Project ID: Study Director: Brian Cortright
Sponsor Contact: Jeremy O'Brien

Reps: 4 Plots: 10 by 40 feet

Spray vol: 15 GAL/AC Mix Size: 3 liters (calculated mix size 2.607)

Trt	Treatment	Form Form	Form	Rate	Appl	Spray Volume	Mix Mix	Amt Product	Rep			
No.	Name	Conc Unit	Type	Rate Unit	Code	Volume Unit	Size Unit	to Measure	1	2	3	4
1	Buccaneer Plus	10.5LB/GAL	EC	1qt/a	Α	15GAL/AC	3liters	50.0 ml/mx	103	204	301	404
2	Brandt Smart Trio	10.5LB/GAL	EC	1qt/a	Α	15GAL/AC	3liters	50.0 ml/mx	102	201	303	401
	Buccaneer Plus	41%	EC	1qt/a	Α	15GAL/AC	3liters	50.0 ml/mx				
	Brandt Smart Trio	10.5LB/GAL	EC	1qt/a	В	15GAL/AC	3liters	50.0 ml/mx				
3	Albion B5	10.5LB/GAL	EC	16fl oz/a	Α	15GAL/AC	3liters	25.0 ml/mx	104	202	304	402
	Buccaneer Plus	41%	EC	1qt/a	Α	15GAL/AC	3liters	50.0 ml/mx				
	Albion B5	10.5LB/GAL	EC	16fl oz/a	В	15GAL/AC	3liters	25.0 ml/mx				
4	Albion B5	10.5LB/GAL	EC	1qt/a	Α	15GAL/AC	3liters	50.0 ml/mx	101	203	302	403
	Buccaneer Plus	41%	EC	1qt/a	Α	15GAL/AC	3liters	50.0 ml/mx				
	Albion B5	10.5LB/GAL	EC	1qt/a	В	15GAL/AC	3liters	50.0 ml/mx				

Sort Order: Treatment

Nov-20-2015 (ALB1501M Weed Soybean)

ARM 2014.7 AOV Means Table Page 2 of 4

Pacific Agricultural Research

Evaluate the efficacy of Albion B5 compared to Brandt Smart Trio when applied with glyphosate for weed control and yield enhancement on soybeans under field conditions.

Trial ID: ALB1501M Location: Albion, MI Trial Year: 2015

Protocol ID: ALB1501M Investigator: Brian Cortright
Project ID: Study Director: Brian Cortright
Sponsor Contact: Jeremy O'Brien

Pest Type	W Weed						
Pest Type Pest Code	vv vveed	CHEAL	DIGSS	OXASS	SETSS	AMBEL	
Pest Scientific Name		Chenopodium al>	Digitaria sp.	Oxalis sp.	Setaria sp.	Ambrosia artem>	
Pest Name		Common lambsqu>	Crabgrass	Wood sorrel	Foxtail millet	Common ragweed	
	GLXMA		GLXMA			•	
Crop Code BBCH Scale	BSOY	GLXMA BSOY	BSOY	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY	
Crop Scientific Name	Glycine max						
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Glycine max Soybean	
Crop Variety	AG2623	AG2623	AG2623	AG2623	AG2623	AG2623	
Description	Total % control	% Control LQ	% Control Crab>	% Control Oxal>	% Control Foxt>	% Control Ragw>	
Part Assessed	CANOPY P	% CONTOL LQ	CANOPY P	CANOPY P	CANOPY P	% Control Ragw>	
Assessment Date	Jul-5-2015	Jul-5-2015	Jul-5-2015	Jul-5-2015	Jul-5-2015		
Assessment Type	PESCON	PESCON	PESCON	PESCON	PESCON	PESCON	
, · · · · · · · · · · · · · · · · · · ·	PESCON %	PESCON %	PESCON %	PESCON %		PESCON	
Assessment Unit Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	% 1 PLOT	1 PLOT	
	1 PLOT						
Collection Basis, Unit	1 PLUI	T PLOT	T PLUI	T PLOT	1 PLUI	1 PLOI	
Number of Subsamples	20 20	20 20	20 20	20 20	20 20	20 20	
Days After First/Last Applic.	26 26	26 26	26 26	26 26	26 26	26 26	
Trt-Eval Interval	26 DA-A 37 DP-1						
Plant-Eval Interval	37 DP-1						
ARM Action Codes	2	2	0	2	0	2	
Number of Decimals					2		
Trt Treatment Rate Appl							
No. Name Rate Unit Code	1	2	3	4	5	6	
1Buccaneer Plus 1qt/a A	97.50a	97.50a	100.00a	100.00a	100.00a	97.50a	
2Brandt Smart Trio 1qt/a A	72.50c	57.50b	100.00a	100.00a	100.00a	97.50a	
Buccaneer Plus 1qt/a A							
Brandt Smart Trio 1qt/a B							
3Albion B5 16fl oz/a A	83.75b	95.00a	100.00a	100.00a	96.25a	77.50a	
Buccaneer Plus 1qt/a A							
Albion B5 16fl oz/a B							
4Albion B5 1qt/a A	87.50ab	87.50a	100.00a	100.00a	100.00a	75.00a	
Buccaneer Plus 1qt/a A							
Albion B5 1qt/a B							
LSD P=.05	10.516	22.023	0.000	0.000	3.828	20.346	
Standard Deviation	6.575	13.769	0.000	0.000	2.394	12.720	
CV	7.71	16.32	0.0	0.0	2.42	14.64	
Bartlett's X2	3.092	4.82	0.0	0.0	0.0	8.306	
P(Bartlett's X2)	0.378	0.185				0.04*	
Skewness	-0.2119	-1.3009*			-3.0297*	-1.0172	
Kurtosis	-1.3255	0.8533	-	-	9.0934*	-0.3208	
		,			,		
Replicate F	1.578	1.088	0.000	0.000	1.000	2.202	
Replicate Prob(F)	0.2616	0.4027	1.0000	1.0000	0.4363	0.1575	
Treatment F	9.867	7.154	0.000	0.000	2.455	3.747	
Treatment Prob(F)	0.0033	0.0093	1.0000	1.0000	0.1298	0.0537	

Means followed by same letter do not significantly differ (P=.05, LSD)

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Nov-20-2015 (ALB1501M Weed Soybean)

ARM 2014.7 AOV Means Table Page 3 of 4

Pacific Agricultural Research

Evaluate the efficacy of Albion B5 compared to Brandt Smart Trio when applied with glyphosate for weed control and yield enhancement on soybeans under field conditions.

Trial ID: ALB1501M Location: Albion, MI Trial Year: 2015

Protocol ID: ALB1501M Investigator: Brian Cortright
Project ID: Study Director: Brian Cortright
Sponsor Contact: Jeremy O'Brien

Pest Type			W Weed	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code			ERICA					
Pest Scientific Name			Conyza canaden>					
Pest Name			Canada horsewe>	01.7444	01.7/144	01.7444	01.7444	01.7444
Crop Code			GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
BBCH Scale			BSOY	BSOY	BSOY	BSOY	BSOY	BSOY
Crop Scientific Name			Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max
Crop Name			Soybean	Soybean	Soybean	Soybean	Soybean	Soybean
Crop Variety			AG2623	AG2623	AG2623	AG2623	AG2623	AG2623
Description			% Control Mare>	Yield	% Moisture	Test Weight	Bushels Per Ac>	
Part Assessed			CANOPY P	YIELD C	YIELD C	YIELD C	YIELD C	YIELD C
Assessment Date Assessment Type			Jul-5-2015 PESCON	Oct-15-2015 WEIGHT	Oct-15-2015 MOICON	Oct-15-2015 WEITES	Oct-15-2015 YIELD	Oct-15-2015 INCGRO
Assessment Unit			% PESCON	WEIGHT LB	WOICON	LB	BU	DOLLAR
Sample Size, Unit			1 PLOT	80 ROWFT	80 ROWFT	80 ROWFT	1 A	1 A
Collection Basis, Unit			1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 A	1 A
Number of Subsamples			1 7101	1 FLUI	1 FLOT	1 FLU1	1 A	1 A
Days After First/Last Ap			26 26	128 76	128 76	128 76	128 76	128 76
Trt-Eval Interval	plic.		26 DA-A	76 DA-B	76 DA-B	76 DA-B	76 DA-B	76 DA-B
Plant-Eval Interval			37 DP-1	139 DP-1	139 DP-1	139 DP-1	139 DP-1	139 DP-1
ARM Action Codes			37 DI -1	139 D1 -1	133 D1 -1	139 D1 -1	TY1	T2
Number of Decimals			2	2	2	2	2	2
Trt Treatment	Rate	Appl	_	_	_	_	_	-
	Rate Unit	Code	7	8	9	10	11	12
1Buccaneer Plus	1gt/a	A	100.00a	12.10a	13.48a	60.63a	43.68a	393.09a
2Brandt Smart Trio	1qt/a	A	100.00a	12.14a	13.58a	60.05a	43.77a	393.94a
Buccaneer Plus	1qt/a	Α	100.000	12.114	10.004	00.000	10.774	000.014
	•							
Brandt Smart Trio	1qt/a	В	0.7.00	40.00	40.55			
3Albion B5	16fl oz/a		85.00a	12.68a	13.55a	59.93a	45.72a	411.45a
Buccaneer Plus	1qt/a	Α						
Albion B5	16fl oz/a	В						
4Albion B5	1qt/a	Α	100.00a	11.82a	13.38a	59.68a	42.70a	384.27a
Buccaneer Plus	1qt/a	Α						
Albion B5	1gt/a	В						
LSD P=.05	. 4		13.852	2.570	0.440	2.706	9.202	82.819
Standard Deviation			8.660	1.607	0.275	1.692	5.753	
CV			9.0	13.19	2.04	2.82	13.09	13.09
Bartlett's X2			0.0	0.085	4.673	2.34	0.06	
P(Bartlett's X2)				0.994	0.197	0.505	0.996	0.996
Skewness			-2.5095*	-0.2579	-1.3838*	0.0596	-0.2691	-0.2691
Kurtosis			4.898*	-1.3351	2.8188*	0.4188	-1.3408	-1.3408
Replicate F			1.000	1.436	0.758	0.529	1.486	1.486
Replicate Prob(F)			0.4363	0.2957	0.5455	0.6732	0.2832	0.2832
Treatment F			3.000	0.200	0.427	0.226	0.193	
Treatment Prob(F)			0.0877	0.8939	0.7385	0.8759	0.8984	0.8984
			0.0011	0.0000	0.7 000	0.07.00	0.0004	0.0004

Nov-20-2015 (ALB1501M Weed Soybean)

ARM 2014.7 AOV Means Table Page 4 of 4

Pacific Agricultural Research

Evaluate the efficacy of Albion B5 compared to Brandt Smart Trio when applied with glyphosate for weed control and yield enhancement on soybeans under field conditions.

Trial ID: ALB1501M Location: Albion, MI Trial Year: 2015

Protocol ID: ALB1501M Investigator: Brian Cortright
Project ID: Study Director: Brian Cortright
Sponsor Contact: Jeremy O'Brien

Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

Pest Code

CHEAL, Chenopodium album, = US

DIGSS, Digitaria sp., = US OXASS, Oxalis sp., = US

SETSS, Setaria sp., = US

AMBEL, Ambrosia artemisiifolia, = US

ERICA, Conyza canadensis, = US

Crop Code

GLXMA, BSOY, Glycine max, = US

Part Assessed

CANOPY = canopy

YIELD = yield

P = Pest is Part Rated

C = Crop is Part Rated

Assessment Type

PESCON = pest control

WEIGHT = weight

MOICON = moisture content

WEITES = weight - test

YIELD = yield

INCGRO = income - gross / value

Assessment Unit % = percent

LB = pound

BU = bushel

DOLLAR = dollar

PLOT = total plot ROWFT = row-foot

A = acre

PLOT = total plot

A = acre

Plant-Eval Interval

37 DP-1 = 1 GLXMA May-29-2015 139 DP-1 = 1 GLXMA May-29-2015

ARM Action Codes

TY1 = 3.63*[C8]*(100-[C9])/87

T2 = [11]*9

