

6 Sampling and Sample Shipment

At all sites, wheat, rice and soybean samples were successfully collected. One sample was collected from each of the three plots (one control and two treated plots) at each of the six sites. In all cases, the untreated plots were sampled before the treated plots. Equipment was thoroughly cleaned before use and between treated samples. Combine-type equipment was flushed by harvesting an untreated area before beginning the harvest of the trial site plots. Samples were placed in pre-labeled plastic-lined sample bags. If sample material was touched by person(s) collecting sample, disposal gloves were used and changed between treated samples.

Sampling information is presented in Table 13, and sample storage and shipping information is presented in Table 14.

7 Crop Destruction

At all six sites the crop from the treated plot was harvested and left on the plot area to degrade into the environment or be disced later. Crop destruction information is presented in Table 15.

D Deviation

Deviations that occurred during the field phase of this study were documented and reported to the Study Director. The deviations are listed numerically and had no impact on the results of this study.

Deviation No. 1

At Sites IA01 and IA02, the application interval between the second and third application dates was 9 days. Protocol Amendment 1 requests a 7-day application interval. Also, the samples were collected at 6 day PHI. Protocol Amendment 1 requests a 7-day PHI.

E Quality Control

Quality control measures taken to maintain sample integrity and to avoid contamination at the field test sites were recorded in the field notebooks and include the following

- Plots were laid out with adequate buffer zones and situated in a manner designed to minimize contamination due to drift and run-off of the test substance. The untreated plot was sampled before the treated plot at each test site.
- All samples were labeled, and stored and shipped in a manner designed to prevent contamination and decomposition of the samples. Control and treated samples were boxed separately for shipment and were accompanied in transit with appropriate chain-of-custody forms.
- Access to the field plots, chemical storage, residue sample storage, trial records, etc., was restricted to authorized personnel.

F Storage of Raw Data

Study specific raw data generated at the field test sites will be transferred to the Sponsor upon acceptance of the final field summary report. Non study-specific raw data generated at the field test sites will be maintained with each of the field investigators.

IV TABLES

Table 1 Site Codes, Crop, Locations and Field Principal Investigators

Site Code & Crop	Site Location (City, State, County, Region)	Field Principal Investigator
NSW01 Wheat	Bathurst, NSW Australia	Martin Collett Agrisearch Services Pty Ltd 50 Leewood Drive Orange NSW 2800 Australia
NSW01 Wheat	Manildra, NSW Australia	Martin Collett Agrisearch Services Pty Ltd 50 Leewood Drive Orange NSW 2800 Australia
CA01 Rice	Glenn, CA Glenn County EPA Region 10	Debra Keenan Research 2000 PMB 298 236 West East Avenue, Suite A Chico, CA 95926
AR01 Rice	Proctor, Arkansas Crittenden County EPA Region 4	Don Harlan Mid-South Ag Research 2383 Hinckley Road Proctor, AR 72376
IA01 Soybean	Richland, Iowa Jefferson County EPA Region 5	David Bennett Bennett Ag Research 1109 Ivy Avenue Richland, IA 52585
IA02 Soybean	Richland, Iowa Jefferson County EPA Region 5	David Bennett Bennett Ag Research 1109 Ivy Avenue Richland, IA 52585

Table 2 Field Pesticide History

Site Code	Month/Year	Crop	Product/Formulation	Active Ingredient(s)	Rate (lb ai/A)
NSW01	No Pesticides applied in 2002				
NSW02	No Pesticides applied in 2002				
CA01	05/02	Rice	Ordram 15G	Molinate	3.9
	05/02	Rice	Londax 60DF	Bensulfuron Methyl	0.063 oz ai/A
	05/02	Rice	Bolero 15G	Thiobencarb	4
	06/02	Rice	Wham 4E	Propanil	4
AR01	05/02	Rice	Command 3ME	Clomazone	0.4
	05/02	Rice	Bolero 8E	Thiobencarb	4.0
	06/02	Rice	Stam 4E	Propanil	4.0
	06/02	Rice	Facet 75WD	Quinclorac	0.5
	06/02	Rice	IR5878	Not given	0.07
IA01	06/02	Corn	Harness 7 lb ai/gal	Acetochlor	1.97
	06/02	Corn	Atrazine 90DF	Atrazine	2.0
IA02	06/02	Corn	Harness 7 lb ai/gal	Acetochlor	1.97
	06/02	Corn	Atrazine 90DF	Atrazine	2.0
	06/02	Corn	Roundup Ultra Max	Glyphosate	1.0

Table 3 Soil Type

Site Code	Soil Series Type
NSW01	Brown Sandy Loam
NSW02	Brown Rocky Loam
CA01	Zamora Silty Clay Loam
AR01	Sharkey Silty Clay
IA01	Taintor Silty Clay Loam
IA02	Taintor Silty Clay Loam

Table 4 Field Test Site Layout

Site Code	Control Plot Width x Length in Feet (Area in Square Feet) (Area in Acres)	Treated Plot Width x Length in Feet (Area in Square Feet) (Area in Acres)
	Plot 1	Plot 2 and Plot 3
NSW01	26 2 x 65 6 (1718 72) (0 0395)	26 2 x 65 6 (1718 72) (0 0395)
NSW02	26 2 x 65 6 (1718 72) (0 0395)	26 2 x 65 6 (1718 72) (0 0395)
CA01	26 6 x 100 (2660) (0 0611)	26 6 x 100 (2660) (0 0611)
AR01	24 x 50 (1200) (0 0275)	24 x 50 (1200) (0 0275)
IA01	30 x 50 (1500) (0 0344)	30 x 50 (1500) (0 0344)
IA02	30 x 50 (1500) (0 0344)	30 x 50 (1500) (0 0344)

Table 5 Field Test Site Preparation and Maintenance

Site Code	Date	Pesticide (Product/Active Ingredient)	Rate (lb ai/A)	Date	Agronomic Practice	Date	Fertilizer	Rate (lb/A)
NSW01	No Pesticides used in 2003				None	06/12/03	N-P-S	80 kg/ha
NSW02	05/26/03	Roundup SL (Glyphosate)	1.2 L/ha		None			
	05/31/03	Trifluralin EC /Trifluralin	1.2 L/ha			06/01/03	P-S-Ca	120 kg/ha
CA01	05/30/03	Ordram 15G/ Molinate	3.9	05/13/03	Land plane	05/15/03	Aqua	75 Unit Nitrogen
	06/02/03	Bluestone 99%/ Copper Sulfate Crystals	14.85	05/15/03	Disc twice prior to Planting	05/20/03	16-20-0	200 lb/A
	06/04/03	Bluestone 99%/ Copper Sulfate Crystals	14.85	05/15/03	Roll prior to planting			
				05/26/03	Permanent flood to 4-6 in (continuous)			
	06/05/03	Shark 40%/ Carfentrazone-Ethyl	0.2	09/10/03	Drain fields for Harvest			
	06/25/03	Stam 4E/Propanil	4					
	06/25/03	Grandstand 4C/ Trinlopyr	0.1875					
	07/11/03	Clincher/Cyhalofop	0.24					

Table 5 Field Test Site Preparation and Maintenance (Continued)

Site Code	Date	Pesticide (Product/Active Ingredient)	Rate (lb ai/A)	Date	Agronomic Practice	Date	Fertilizer	Rate (lb/A)
AR01	06/10/03	Command 3ME/		07/08/03	4 inches irrigation	07/07/03	Urea 46%	150
		Clomazone	0.38	07/08/03	~1 inch water per day			
	06/10/03	Facet 75DF/		to	added to individual			
		Quinclorac	0.5	09/11/03	plots to maintain			
	06/10/03	Bolero 8E/			a flood			
		Thiobencarb	4.0	09/12/03	Drained plots			
		Stam 4E/Propamil	4.0					
IA01	07/03/03	Facet 75DF/						
		Quinclorac	0.5					
	05/22/03	Gauntlet 75 DF/		04/15/03	Field cultivation		No fertilizer applied	
		Sulfentrazone	0.25					
	05/22/03	Dual II Magnum/						
		S-metolachlor	0.95					
	07/02/03	Flexstar/						
		Sodium salt of fomesafen	0.29					
	07/02/03	Fusion/						
		Fluazifop-P-butyl	0.16					
IA02	06/30/03	Touchdown/		04/15/03	Field cultivation		No fertilizer applied	
		Glyphosate	0.75	05/02/03	Field cultivation			

Table 6 Crop

Site Code	Variety	Planting Date	Row Spacing (inches)	Plant Spacing (inches)
NSW01	Wheat	06/12/03	7	70 kg/ha
NSW02	Wheat	06/01/03	7	70 kg/ha
CA01	M401 Rice	05/28/03	N/A	N/A
AR01	Wells (Indica Strain) Rice	06/10/03	6	1
IA01	Pioneer 93B86 Soybean	05/20/03	15	5 2
IA02	Pioneer 93B68 Soybean	06/04/03	15	5 2

Table 7 Test Substance Shipping and Storage

Site Code	Amount Shipped	Date Received By FPI	Test Site Storage Temp ¹	
			Min °C	Max °C
NSW01	1 liter	11/05/03	8	33
NSW02	1 liter	11/05/03	8	32
CA01	1 liter	09/15/03	8 34	31 7
AR01	1 liter	09/15/03	19	24
IA01	1 liter	09/16/03	12 11	22 89
IA02	1 liter	10/02/03	12 11	22 89

¹Storage temperatures represent time from receipt of test substance by Principal Investigator to last application

Table 8 Equipment Calibration and Application

Site Code And Crop	Plot Number	Application Number	Calibration Date	Calibrated GPA	Application Date
NSW01 Wheat	2	1	12/19/03	12.3	12/19/03
	3	1	12/19/03	12.3	12/19/03
NSW02 Wheat	2	1	12/01/03	12.8	12/01/03
	3	1	12/01/03	12.8	12/01/03
CA01 Rice	2	1	10/28/03	20	10/28/03
	3	1	09/25/03	20	09/25/03
	3	2	10/04/03	20	10/04/03
	3	3	10/16/03	20	10/16/03
	3	4	10/28/03	20	10/28/03
AR01 Rice	2	1	10/09/03	20.6	10/09/03
	3	1	09/15/03	20.8	09/15/03
	3	2	09/23/03	20.6	09/23/03
	3	3	10/01/03	20.6	10/01/03
	3	4	10/09/03	20.6	10/09/03
LA01 Soybean	2	1	09/15/03	22.9	09/16/03
	2	2	09/23/03	23.2	09/23/03
	2	3	10/02/03	22.6	10/02/03
	2	4	10/09/03	23.3	10/09/03
	3	1	09/15/03	22.9	09/16/03
	3	2	09/23/03	23.2	09/23/03
	3	3	10/02/03	22.6	10/02/03
	3	4	10/09/03	23.3	10/09/03
LA02 Soybean	2	1	09/15/03	22.9	09/16/03
	2	2	09/23/03	23.2	09/23/03
	2	3	10/02/03	22.6	10/02/03
	2	4	10/09/03	23.3	10/09/03
	3	1	09/15/03	22.9	09/16/03
	3	2	09/23/03	23.2	09/23/03
	3	3	10/02/03	22.6	10/02/03
	3	4	10/09/03	23.3	10/09/03

¹N/A = Not applicable

Table 9 Application

Site Code	Plot	App No	Equipment Type	Nozzle Type	Nozzle Tip No	Nozzle No	Spacing (in)	Pressure Source	Approx Pressure (psi)
NSW01	2	1	Boom Sprayer	Flat Fan	XR 8001 VH	4	20	Compressed Air	30
	3	1	Boom Sprayer	Flat Fan	XR 8001 VH	4	20	Compressed Air	30
NSW02	2	1	Backpack Sprayer	Flat Fan	8001 VH	4	20	Compressed Air	30
	3	1	Backpack Sprayer	Flat Fan	8001 VH	4	20	Compressed Air	30
CA01	2	1	Backpack Sprayer	Flat Fan	XR8003	8	20	CO ₂	30
	3	1	Backpack Sprayer	Flat Fan	XR8003	8	20	CO ₂	30
	3	2	Backpack Sprayer	Flat Fan	XR8003	8	20	CO ₂	30
	3	3	Backpack Sprayer	Flat Fan	XR8003	8	20	CO ₂	30
	3	4	Backpack Sprayer	Flat Fan	XR8003	8	20	CO ₂	30
AR01	2	1	Backpack Sprayer	Flat Fan	AI 110015 VS	8	18	CO ₂	50
	3	1	Backpack Sprayer	Flat Fan	AI 110015 VS	8	18	CO ₂	50
	3	2	Backpack Sprayer	Flat Fan	AI 110015 VS	8	18	CO ₂	50
	3	3	Backpack Sprayer	Flat Fan	AI 110015 VS	8	18	CO ₂	50
	3	4	Backpack Sprayer	Flat Fan	AI 110015 VS	8	18	CO ₂	50

Table 9 Application (Continued)

Site Code	Plot	App No	Equipment Type	Nozzle Type	Nozzle Tip No	Nozzle No	Spacing (in)	Pressure Source	Approx Pressure (psi)
IA01	2	1	Tractor-mounted boom sprayer	Flat Fan	8002	9	20	CO ₂	30
	2	2	Tractor-mounted boom sprayer	Flat Fan	8002	9	20	CO ₂	30
	2	3	Tractor-mounted boom sprayer	Flat Fan	8002	9	20	CO ₂	30
	2	4	Tractor-mounted boom sprayer	Flat Fan	8002	9	20	CO ₂	30
	3	1	Tractor-mounted boom sprayer	Flat Fan	8002	9	20	CO ₂	30
	3	2	Tractor-mounted boom sprayer	Flat Fan	8002	9	20	CO ₂	30
	3	3	Tractor-mounted boom sprayer	Flat Fan	8002	9	20	CO ₂	30
	3	4	Tractor-mounted boom sprayer	Flat Fan	8002	9	20	CO ₂	30

Table 9 Application (Continued)

Site Code	Plot	App No	Equipment Type	Nozzle Type	Nozzle Tip No	Nozzle No	Spacing (in)	Pressure Source	Approx Pressure (psi)
IA02	2	1	Tractor-mounted boom sprayer	Flat Fan	8002	9	20	CO ₂	30
	2	2	Tractor-mounted boom sprayer	Flat Fan	8002	9	20	CO ₂	30
	2	3	Tractor-mounted boom sprayer	Flat Fan	8002	9	20	CO ₂	30
	2	4	Tractor-mounted boom sprayer	Flat Fan	8002	9	20	CO ₂	30
	3	1	Tractor-mounted boom sprayer	Flat Fan	8002	9	20	CO ₂	30
	3	2	Tractor-mounted boom sprayer	Flat Fan	8002	9	20	CO ₂	30
	3	3	Tractor-mounted boom sprayer	Flat Fan	8002	9	20	CO ₂	30
	3	4	Tractor-mounted boom sprayer	Flat Fan	8002	9	20	CO ₂	30

Table 10 Product Rate Determination

Wheat Site Code And Plot	Application Date	Plot No	App No	Volume			Total Pass Time (sec)	Calibrated Spray Rate (mL/sec)	Spray Mix Applied To Plot (mL) ¹	Treated Area (Acres)	Spray Rate (GPA) ²	Rate		
				Test Substance (mL)	Carrier (mL)	Total Mixture (mL)						mL/A ³	kg ai/ha ⁴	% of Target ⁵
NSW01 1X rate	12/19/03	2	1	28	3972	4000	81.00	23	1863	0.0395	12.5	331.2	0.41	103
NSW01 5X rate	12/19/03	3	1	139	3861	4000	82.00	23	1886	0.0395	12.6	1657.3	2.0	100
NSW02 1X rate	12/01/03	2	1	26.7	3973.3	4000	82.00	24	1968	0.0395	13.2	333.5	0.41	103
NSW02 5X rate	12/01/03	3	1	133.4	3866.6	4000	80.00	24	1920	0.0395	12.8	1615.7	2.0	100

¹Spray Mix Applied to Plot (mL) = Total Pass Times (sec) x Calibrated Spray Rate (mL/sec)

²Spray Rate (GPA) = $\frac{\text{Spray Mix Applied to Plot (mL)}}{3785 \text{ mL/gal}} \times \frac{1}{\text{Treated Area (acres)}}$

³Actual Rate mL/A = $\frac{\text{Test Substance in Spray Mixture (ml)}}{\text{Total Mixture Volume (mL)}} \times \text{Actual Spray Rate (GPA)} \times \frac{3785 \text{ mL}}{1 \text{ gal}}$

⁴Actual Rate kg ai/ha = $\frac{\text{Actual Rate mL}}{\text{Acre}} \times \frac{1 \text{ g water}}{1 \text{ mL water}} \times \frac{50 \text{ g ai}}{100 \text{ g product}} \times \frac{\text{kg}}{1000 \text{ g}} \times \frac{2.47 \text{ A}}{\text{ha}}$

⁵Percent of Target = $\frac{\text{Actual Rate (kg ai/ha)}}{\text{Target Rate (kg ai/ha)}} \times 100$

⁶Wheat 1X rate = 0.4 kg ai/ha
Wheat 5X rate = 2.0 kg ai/ha

Table 10 Product Rate Determination (Continued)

Rice Site Code And Plot	Application Date	Plot No	Volume			Total Pass Time (sec)	Calibrated Spray Rate (mL/sec)	Spray Mix Applied To Plot (mL) ¹	Treated Area (Acres)	Spray Rate (GPA) ²	Rate		
			Test Substance (mL)	Carrier (mL)	Total Mixture (mL)						mL/A ³	kg a/ha ⁴	% of Target ⁵
CA01 IX rate	10/28/03	2	179	11176	11355	90 98	50 9	4630 9	0 0611	20 0	1193 3	1 47	98 2
CA01 IX rate	09/25/03	3	156	9685	9841	90 92	51 2	4655 1	0 0611	20 1	1206 0	1 49	99 3
CA01 IX rate	10/04/03	3	179	11176	11355	90 53	51 1	4626 1	0 0611	20 0	1193 3	1 47	98 2
CA01 IX rate	10/16/03	3	179	11176	11355	90 24	51 5	4647 4	0 0611	20 1	1199 3	1 48	98 7
CA01 IX rate	10/28/03	3	179	11176	11355	90 98	50 9	4630 9	0 0611	20 0	1193 3	1 47	98 2

¹Spray Mix Applied to Plot (mL) = Total Pass Times (sec) x Calibrated Spray Rate (mL/sec)

²Spray Rate (GPA) = $\frac{\text{Spray Mix Applied to Plot (mL)}}{3785 \text{ mL/gal}} \times \frac{1}{\text{Treated Area (acres)}}$

³Actual Rate mL/A = $\frac{\text{Test Substance in Spray Mixture (mL)}}{\text{Total Mixture Volume (mL)}} \times \text{Actual Spray Rate (GPA)} \times \frac{3785 \text{ mL}}{1 \text{ gal}}$

⁴Actual Rate kg a/ha = $\frac{\text{Actual Rate mL}}{\text{Acres}} \times \frac{1 \text{ g water}}{1 \text{ mL water}} \times \frac{50 \text{ g a}}{100 \text{ g product}} \times \frac{\text{kg}}{1000 \text{ g}} \times \frac{2.47 \text{ A}}{\text{ha}}$

⁵Percent of Target = $\frac{\text{Actual Rate (kg a/ha)}}{\text{Target Rate (kg a/ha)}} \times 100$

⁶Rice IX rate = 1.5 kg a/ha

Table 10 Product Rate Determination (Continued)

Rice Site Code And Plot	Application Date	App Plot No	Volume			Total Pass Time (sec)	Calibrated Spray Rate (mL/sec)	Spray Mix Applied To Plot (mL) ¹	Treated Area (Acres)	Spray Rate (GPA) ²	Rate		% of Target ⁵	
			Test Substance (mL)	Carrier (mL)	Total Mixture (mL)						mL/A ³	kg ai/ha ⁴		
AR01 IX rate ⁶	10/09/03	2	1	47	2953	3000	27 19	79 0	2148 0	0 0275	20 6	1221 5	1 51	101
AR01 IX rate	09/15/03	3	1	47	2953	3000	27 34	79 3	2168 1	0 0275	20 8	1233 4	1 52	102
AR01 IX rate	09/23/03	3	2	46	2954	3000	27 29	79 5	2169 6	0 0275	20 8	1207 2	1 49	99 1
AR01 IX rate	10/01/03	3	3	47	2953	3000	27 25	79 2	2158 2	0 0275	20 7	1227 5	1 52	102
AR01 IX rate	10/09/03	3	4	47	2953	3000	27 43	79 0	2167 0	0 0275	20 8	1233 4	1 52	102

¹Spray Mix Applied to Plot (mL) = Total Pass Times (sec) x Calibrated Spray Rate (mL/sec)

²Spray Rate (GPA) = $\frac{\text{Spray Mix Applied to Plot (mL)}}{3785 \text{ mL/gal}} \times \frac{1}{\text{Treated Area (acres)}}$

³Actual Rate mL/A = $\frac{\text{Test Substance in Spray Mixture (ml)}}{\text{Total Mixture Volume (mL)}} \times \text{Actual Spray Rate (GPA)} \times \frac{3785 \text{ mL}}{1 \text{ gal}}$

⁴Actual Rate kg ai/ha = $\frac{\text{Actual Rate mL}}{\text{Acre}} \times \frac{1 \text{ g water}}{1 \text{ mL water}} \times \frac{50 \text{ g ai}}{100 \text{ g product}} \times \frac{\text{kg}}{1000 \text{ g}} \times \frac{1 \text{ ha}}{247 \text{ A}}$

⁵Percent of Target = $\frac{\text{Actual Rate (kg ai/ha)}}{\text{Target Rate (kg ai/ha)}} \times 100$

⁶Rice IN rate = 1.5 kg ai/ha

Table 10 Product Rate Determination (Continued)

Soybean Site Code And Plot	Application Date	Plot	App No	Volume			Total Pass Time (sec)	Calibrated Spray Rate (mL/sec)	Spray Mix Applied To Plot (mL) ¹	Treated Area (Acres)	Spray Rate (GPA) ²	Rate		
				Test Substance (mL)	Carrier (mL)	Total Mixture (mL)						mL/A ³	kg ai/ha ⁴	% of Target ⁵
IA01 IX rate ⁶	09/16/03	2	1	32	3350	3382	30.81	96.7	2979.3	0.0344	22.9	820.1	1.01	101
IA01 IX rate	09/23/03	2	2	32	3395	3427	30.60	98.4	3011.0	0.0344	23.1	816.4	1.01	101
IA01 IX rate	10/02/03	2	3	32	3305	3337	30.78	96.2	2961.0	0.0344	22.7	823.9	1.02	102
IA01 IX rate	10/09/03	2	4	32	3407	3439	30.66	97.5	2989.4	0.0344	23.0	810.0	1.00	100

¹Spray Mix Applied to Plot (mL) = Total Pass Times (sec) x Calibrated Spray Rate (mL/sec.)

²Spray Rate (GPA) = $\frac{\text{Spray Mix Applied to Plot (mL)}}{3785 \text{ mL/gal}} \times \frac{1}{\text{Treated Area (acres)}}$

³Actual Rate mL/A = $\frac{\text{Test Substance in Spray Mixture (mL)}}{\text{Total Mixture Volume (mL)}} \times \text{Actual Spray Rate (GPA)} \times \frac{3785 \text{ mL}}{1 \text{ gal}}$

⁴Actual Rate kg ai/ha = $\frac{\text{Actual Rate mL}}{\text{Acre}} \times \frac{1 \text{ g water}}{1 \text{ mL water}} \times \frac{50 \text{ g ai}}{100 \text{ g product}} \times \frac{\text{kg}}{1000 \text{ g}} \times \frac{2.47 \text{ A}}{\text{ha}}$

⁵Percent of Target = $\frac{\text{Actual Rate (kg ai/ha)}}{\text{Target Rate (kg ai/ha)}} \times 100$

⁶Soybean IX rate = 1.0 kg ai/ha

Table 10 Product Rate Determination (Continued)

Soybean Site Code And Plot	Application Date	Plot No	App No	Volume			Total Pass Time (sec)	Calibrated Spray Rate (mL/sec)	Spray Mix Applied To Plot (mL) ¹	Treated Area (Acres)	Spray Rate (GPA) ²	Rate		
				Test Substance (mL)	Carrier (mL)	Total Mixture (mL)						mL/A ³	kg/ha ⁴	% of Target ⁵
IA01 SX rate ⁶	09/16/03	3	1	158	3220	3378	31.34	96.7	3030.6	0.0344	23.3	4125.0	5.09	102
IA01 SX rate	09/23/03	3	2	158	3270	3428	30.42	98.4	2993.3	0.0344	23.0	4012.5	4.96	99.2
IA01 SX rate	10/02/03	3	3	158	3180	3338	30.50	96.2	2934.1	0.0344	22.5	4031.1	4.98	99.6
IA01 SX rate	10/09/03	3	4	158	3281	3439	31.04	97.5	3026.4	0.0344	23.2	4034.4	4.98	99.6

¹Spray Mix Applied to Plot (ml) = Total Pass Times (sec) x Calibrated Spray Rate (mL/sec)

²Spray Rate (GPA) = $\frac{\text{Spray Mix Applied to Plot (ml)}}{3785 \text{ mL/gal}} \times \frac{1}{\text{Treated Area (acres)}}$

³Actual Rate mL/A = $\frac{\text{Test Substance in Spray Mixture (ml)}}{\text{Total Mixture Volume (mL)}} \times \text{Actual Spray Rate (GPA)} \times \frac{3785 \text{ ml}}{1 \text{ gal}}$

⁴Actual Rate kg/ha = $\frac{\text{Actual Rate mL}}{\text{Acres}} \times \frac{1 \text{ g water}}{1 \text{ mL water}} \times \frac{50 \text{ g ai}}{100 \text{ g product}} \times \frac{\text{kg}}{1000 \text{ g}} \times \frac{2.47 \text{ A}}{\text{ha}}$

⁵Percent of Target = $\frac{\text{Actual Rate (kg ai/ha)}}{\text{Target Rate (kg ai/ha)}} \times 100$

⁶Soybean SX rate = 5.0 kg ai/ha

Table 10 Product Rate Determination (Continued)

Soybean Site Code And Plot	Application Date	Plot	App No	Volume			Total Pass Time (sec)	Calibrated Spray Rate (mL/sec)	Spray Mix Applied To Plot (mL) ¹	Treated Area (Acres)	Spray Rate (GPA) ²	Rate		
				Test Substance (mL)	Carrier (mL)	Total Mixture (mL)						mL/A ³	kg ai/ha ⁴	% of Target ⁵
IA02 IX rate ⁶	09/16/03	2	1	32	3350	3382	31.1	96.7	3007.4	0.0344	23.1	827.3	1.02	102
IA02 IX rate	09/23/03	2	2	32	3395	3427	30.36	98.4	2987.4	0.0344	22.9	809.4	1.00	100
IA02 IX rate	10/02/03	2	3	32	3305	3337	30.25	96.2	2910.1	0.0344	22.4	813.0	1.00	100
IA02 IX rate	10/09/03	2	4	32	3407	3439	30.36	97.5	2960.1	0.0344	22.7	799.5	0.99	99.0

¹Spray Mix Applied to Plot (mL) = Total Pass Times (sec) x Calibrated Spray Rate (mL/sec)

²Spray Rate (GPA) = $\frac{\text{Spray Mix Applied to Plot (mL)}}{3785 \text{ mL/gal}} \times \frac{1}{\text{Treated Area (acres)}}$

³Actual Rate mL/A = $\frac{\text{Test Substance in Spray Mixture (mL)}}{\text{Total Mixture Volume (mL)}} \times \text{Actual Spray Rate (GPA)} \times \frac{3785 \text{ mL}}{1 \text{ gal}}$

⁴Actual Rate kg ai/ha = $\frac{\text{Actual Rate mL}}{\text{Acre}} \times \frac{1 \text{ g water}}{1 \text{ mL water}} \times \frac{50 \text{ g ai}}{100 \text{ g product}} \times \frac{\text{kg}}{1000 \text{ g}} \times \frac{2.47 \text{ A}}{\text{ha}}$

⁵Percent of Target = $\frac{\text{Actual Rate (kg ai/ha)}}{\text{Target Rate (kg ai/ha)}} \times 100$

⁶Soybean IX rate = 1.0 kg ai/ha

Table 10 Product Rate Determination (Continued)

Soybean Site Code And Plot	Application Date	Plot No	Volume			Total Pass Time (sec)	Calibrated Spray Rate (mL/sec)	Spray Mix Applied To Plot (mL) ¹	Treated Area (Acres)	Spray Rate (GPA) ²	Rate		
			Test Substance (mL)	Carrier (mL)	Total Mixture (mL)						mL/A ³	kg ai/ha ⁴	% of Target ⁵
1A02 SX rate ⁶	09/16/03	3	158	3220	3378	30.98	96.7	2995.8	0.0344	23.0	4071.8	5.03	101
1A02 SX rate	09/23/03	3	158	3270	3428	30.37	98.4	2988.4	0.0344	23.0	4012.5	4.96	99.2
1A02 SX rate	10/02/03	3	158	3180	3338	30.73	96.2	2956.2	0.0344	22.7	4066.9	5.02	100
1A02 SX rate	10/09/03	3	158	3281	3439	30.32	97.5	2956.2	0.0344	22.7	3947.4	4.88	97.6

¹Spray Mix Applied to Plot (mL) = Total Pass Times (sec) x Calibrated Spray Rate (mL/sec)

²Spray Rate (GPA) = $\frac{\text{Spray Mix Applied to Plot (mL)}}{3785 \text{ mL/gal}} \times \frac{1}{\text{Treated Area (acres)}}$

³Actual Rate mL/A = $\frac{\text{Test Substance in Spray Mixture (mL)}}{\text{Total Mixture Volume (mL)}} \times \text{Actual Spray Rate (GPA)} \times \frac{3785 \text{ mL}}{1 \text{ gal}}$

⁴Actual Rate kg ai/ha = $\frac{\text{Actual Rate mL}}{\text{Acre}} \times \frac{1 \text{ g water}}{1 \text{ mL water}} \times \frac{50 \text{ g ai}}{100 \text{ g product}} \times \frac{\text{kg}}{1000 \text{ g}} \times \frac{2.47 \text{ A}}{\text{ha}}$

⁵Percent of Target = $\frac{\text{Actual Rate (kg ai/ha)}}{\text{Target Rate (kg ai/ha)}} \times 100$

⁶Soybean SX rate = 5.0 kg ai/ha