

Table 10: Product Rate Determination (Continued)

Rice Site Code	Test Substance & 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	lb ai/A ^{4,7}	% of Target ^{5,6}
AR01	Fenitrothion 1X 08/27/04	4	1	28	15112	15140	66.61	173	11523.5	0.0275	110.7	774.9	0.91	100
AR01	Fenitrothion 1X 09/03/04	4	2	27.8	15112	15140	66.49	174.2	11582.6	0.0275	111.3	773.5	0.91	100
AR01	Fenitrothion 1X 09/10/04	4	3	28	15112	15140	66.64	172.8	11515.4	0.0275	110.6	774.2	0.91	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 lb ai/A = $\frac{\text{Actual Rate mL}}{\text{Acre}} \times \frac{4.46 \text{ lb ai}}{\text{gallon}} \times \frac{1 \text{ gallon}}{3785 \text{ mL}}$

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

⁶Rice, Fenitrothion 1X rate = 0.91 lb ai/A

⁷To convert lb ai/A to kg ai/ha, multiply lbs ai/A x 1.121

Table 10: Product Rate Determination (Continued)

Rice Site Code	Test Substance & 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	Actual lb ai/A ^{4,7}	% of Target ^{5,6}
AR01	Dimethoate 5X 08/13/04	5	1	28	2972	3000	27.18	92.6	2516.9	0.0275	24.2	854.9	0.903	101
AR01	Dimethoate 5X 08/20/04	5	2	27.5	2972	3000	27.19	92.9	2526.0	0.0275	24.3	843.1	0.891	100
AR01	Dimethoate 5X 08/27/04	5	3	28.0	2972	3000	27.06	92.8	2511.2	0.0275	24.1	851.4	0.900	101
AR01	Dimethoate 5X 09/03/04	5	4	13.8	1486	1500	13.59	92.9	1262.5	0.0138	24.2	842.7	0.891	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 lb ai/A = $\frac{\text{Actual Rate mL}}{\text{Acre}} \times \frac{4 \text{ lb ai}}{\text{gallon}} \times \frac{1 \text{ gallon}}{3785 \text{ mL}}$

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

⁶Rice, Dimethoate 5X rate = 0.89 lb ai/A

⁷To convert lb ai/A to kg ai/ha, multiply lbs ai/A x 1.121

Table 10: Product Rate Determination (Continued)

Rice Site Code	Test Substance & 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	Actual lb ai/A ^{4,7}	% of Target ^{5,6}
AR01	Methyl parathion 5X 09/09/04	5	1	116	2884	1500	13.54	93.1	1260.6	0.0138	24.1	7054.2	3.73	99.5
AR01	Methyl parathion 5X 09/16/04	5	2	116	2884	1500	13.59	93.2	1266.6	0.0138	24.2	7083.5	3.74	99.7

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 lb ai/A = $\frac{\text{Actual Rate mL}}{\text{Acre}} \times \frac{2 \text{ lb ai}^8}{\text{gallon}} \times \frac{1 \text{ gallon}}{3785 \text{ mL}}$

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

⁶Rice, Methyl parathion 5X rate = 3.75 lb ai/A

⁷To convert lb ai/A to kg ai/ha, multiply lbs ai/A x 1.121

⁸A 2 lb ai per gallon Methyl parathion formulation was used rather than a 4 lb ai per gallon as suggested in the protocol.

Table 10: Product Rate Determination (Continued)

Rice Site Code	Test Substance & Application Date	App. No.	Plot	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	Actual lb ai/A ^{4,7}	% of Target ^{5,6}
AR01	Fenitrothion 5X 08/27/04	1	5	140	7500	15140	66.53	173.0	11509.7	0.0275	110.6	3871.0	4.56	100.2
AR01	Fenitrothion 5X 09/03/04	2	5	69	7500	7570	33.10	174.2	5766.0	0.0138	110.4	3808.8	4.49	98.7
AR01	Fenitrothion 5X 09/10/04	3	5	70	7500	7570	33.20	172.8	5737.0	0.0138	109.8	3843.0	4.53	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 lb ai/A = $\frac{\text{Actual Rate mL}}{\text{Acres}} \times \frac{4.46 \text{ lb ai}}{\text{gallon}} \times \frac{1 \text{ gallon}}{3785 \text{ mL}}$

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

⁶Rice, Fenitrothion 5X rate = 4.55 lb ai/A

⁷To convert lb ai/A to kg ai/ha, multiply lbs ai/A x 1.121

Table 10: Product Rate Determination (Continued)

Wheat Site Code	Test Substance & 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	Actual lb ai/A ^{4,7}	% of Target ^{5,6}
ND01	Diquat 1X 09/12/04	7	1	94.5	6905.5	7000	44.53	110.5	4920.6	0.0643	20.2	1032.2	0.55	101.9
ND01	Diquat 5X 09/12/04	8	1	469	6531.5	7000	44.28	110.5	4892.9	0.0643	20.1	5097.3	2.69	100.4

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 lb ai/A = $\frac{\text{Actual Rate mL}}{\text{Acre}} \times \frac{2 \text{ lb ai}}{\text{gallon}} \times \frac{1 \text{ gallon}}{3785 \text{ mL}}$

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

⁶Wheat, Diquat 1X rate = 0.54 lb ai/A
Wheat, Diquat 5X rate = 2.68 lb ai/A

⁷To convert lb ai/A to kg ai/ha, multiply lbs ai/A x 1.121

Table 10: Product Rate Determination (Continued)

Wheat Site Code	Test Substance & 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	lb ai/A ^{4,7}	% of Target ^{5,6}
ND01	Dimethoate 5X 09/06/04	9	1	164	6836	7000	43.31	110.0	4764.1	0.0643	19.6	1738.1	1.837	98.0
ND01	Dimethoate 5X 09/12/04	9	2	164	6836	7000	43.84	110.5	4844.3	0.0643	19.9	1764.7	1.865	99.5
ND01	Methyl parathion 5X 08/28/04	9	1	328	6672	7000	45.09	111	5005.0	0.0643	20.6	3653.5	3.86	102.9
ND01	Methyl parathion 5X 09/04/04	9	2	328	6672	7000	44.64	110.7	4941.6	0.0643	20.3	3600.3	3.80	101.3

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 lb ai/A = $\frac{\text{Actual Rate mL}}{\text{Acre}} \times \frac{4 \text{ lb ai}}{\text{gallon}} \times \frac{1 \text{ gallon}}{3785 \text{ mL}}$

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

⁶Wheat, Dimethoate 5X rate = 1.875 lb ai/A
Wheat, Methyl parathion 5X rate = 3.75 lb ai/A

⁷To convert lb ai/A to kg ai/ha, multiply lbs ai/A x 1.121

Table 10: Product Rate Determination (Continued)

Wheat Site Code	Test Substance & 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	lb ai/A ^{4,7}	% of Target ^{5,6}
ND01	Fenitrothion 5X 09/13/04	9	1	221	30060	30280	62.34	442.4	27579.2	0.0643	113.3	3129.9	3.68	102.8

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 lb ai/A = $\frac{\text{Actual Rate mL}}{\text{Acre}} \times \frac{4.46 \text{ lb ai}}{\text{gallon}} \times \frac{1 \text{ gallon}}{3785 \text{ mL}}$

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

⁶Wheat, Fenitrothion 5X rate = 3.58 lb ai/A

⁷To convert lb ai/A to kg ai/ha, multiply lbs ai/A x 1.121

Table 10: Product Rate Determination (Continued)

Wheat Site Code	Test Substance & 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	lb ai/A ^{4,7}	% of Target ^{5,6}
ND01	Dimethoate 1X 09/06/04	10	1	32.8	6967	7000	42.90	110	4719.0	0.0643	19.4	344.1	0.364	97.1
ND01	Dimethoate 1X 09/12/04	10	2	32.8	6967	7000	44.06	110.5	4868.6	0.0643	20.0	354.7	0.375	100
ND01	Methyl parathion 1X 08/28/04	10	1	65.6	6934	7000	44.38	111	4926.2	0.0643	20.2	716.5	0.757	101
ND01	Methyl parathion 1X 09/04/04	10	2	65.6	6934	7000	43.88	110.7	4857.5	0.0643	20.0	709.4	0.750	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 lb ai/A = $\frac{\text{Actual Rate mL}}{\text{Acres}} \times \frac{4 \text{ lb ai}}{\text{gallon}} \times \frac{1 \text{ gallon}}{3785 \text{ mL}}$

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

⁶Wheat, Dimethoate 1X rate = 0.375 lb ai/A
Wheat, Methyl parathion 1X rate = 0.75 lb ai/A

⁷To convert lb ai/A to kg ai/ha, multiply lbs ai/A x 1.121

Table 10: Product Rate Determination (Continued)

Wheat Site Code	Test Substance & 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	Actual lb ai/A ^{4,7}	% of Target ^{5,6}
ND01	Fenitrothion 1X 09/13/04	10	1	44.0	30242	30280	60.72	442.4	26862.5	0.0643	110.4	607.2	0.72	101.4

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 lb ai/A = $\frac{\text{Actual Rate mL}}{\text{Acres}} \times \frac{4.46 \text{ lb ai}}{\text{gallon}} \times \frac{1 \text{ gallon}}{3785 \text{ mL}}$

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

⁶Wheat, Fenitrothion 1X rate = 0.71 lb ai/A

⁷To convert lb ai/A to kg ai/ha, multiply lbs ai/A x 1.121

Table 10: Product Rate Determination (Continued)

Soybean Site Code	Test Substance & 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)						Actual mL/A ³	Actual lb ai/A ⁸	% of Target ^{6,7}
IA01	Diquat 1X 09/27/04	12	1	95	6540	6635	45	101.9	4585.5	0.0689	17.6	953.8	0.50 ⁴	100
IA01	Paraquat 1X 09/18/04	12	1	32	8630	8673	63.12	94.7	5977.5	0.0689	22.9	319.8	0.25 ⁵	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 = $\frac{\text{Test Substance in Spray Mixture (mL)}}{\text{Total Mixture Volume (mL)}} \times \frac{3785 \text{ mL}}{1 \text{ gal}}$

⁴Actual Rate lb ai/A = $\frac{\text{Actual Rate mL}}{\text{Acre}} \times \frac{2 \text{ lb ai}}{\text{gallon}} \times \frac{1 \text{ gallon}}{3785 \text{ mL}}$

⁵Actual Rate lb ai/A = $\frac{\text{Actual Rate mL}}{\text{Acre}} \times \frac{3 \text{ lb ai}}{\text{gallon}} \times \frac{1 \text{ gallon}}{3785 \text{ mL}}$

⁶Percent of Target = $\frac{\text{Actual Rate (lb ai/A)}}{\text{Target Rate (lb ai/A)}} \times 100$

⁷Soybean, Diquat 1X rate = 0.5 lb ai/A
Soybean, Paraquat 1X rate = 0.25 lb ai/A

⁸To convert lb ai/A to kg ai/ha, multiply lbs ai/A x 1.121

Table 10: Product Rate Determination (Continued)

Soybean Site Code	Test Substance & 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	Actual lb ai/A ⁸	% of Target ^{6,7}
IA01	Diquat 5X 09/27/04	13	1	474	6160	6634	46.03	101.9	4690.5	0.0689	18.0	4867.9	2.57 ⁴	102.8
IA01	Paraquat 5X 09/18/04	13	1	158	8500	8669	63.16	94.7	5981.3	0.0689	22.9	1579.7	1.25 ⁵	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 lb ai/A = $\frac{\text{Actual Rate mL}}{\text{Acre}} \times \frac{2 \text{ lb ai}}{\text{gallon}} \times \frac{1 \text{ gallon}}{3785 \text{ mL}}$

⁵Actual Rate lb ai/A = $\frac{\text{Actual Rate mL}}{\text{Acre}} \times \frac{3 \text{ lb ai}}{\text{gallon}} \times \frac{1 \text{ gallon}}{3785 \text{ mL}}$

⁶Percent of Target = $\frac{\text{Actual Rate (lb ai/A)}}{\text{Target Rate (lb ai/A)}} \times 100$

⁷Soybean, Diquat 5X rate = 2.5 lb ai/A
Soybean, Paraquat 5X rate = 1.25 lb ai/A

⁸To convert lb ai/A to kg ai/ha, multiply lbs ai/A x 1.121

Table 10: Product Rate Determination (Continued)

Soybean Site Code	Test Substance & 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)						Actual mL/A ³	lb ai/A ^{4,7}	% of Target ^{5,6}
IA01	Dimethoate SX 09/06/04	14	1	236	10250	10486	63.09	113.1	7135.5	0.0689	27.4	2334.1	2.47	99
IA01	Dimethoate SX 09/12/04	14	2	238	10320	10558	64.63	113.6	7342.0	0.0689	28.2	2406.1	2.54	102
IA01	Methyl parathion SX 09/06/04	14	1	474	7100	7574	46.24	113.1	5229.7	0.0689	20.1	4761.2	5.0	100
IA01	Methyl parathion SX 09/13/04	14	2	474	7136	7610	46.04	113.0	5202.5	0.0689	19.9	4691.5	5.0	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 lb ai/A = $\frac{\text{Actual Rate mL}}{\text{Acre}} \times \frac{4 \text{ lb ai}}{\text{gallon}} \times \frac{1 \text{ gallon}}{3785 \text{ mL}}$

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

⁶Soybean, Dimethoate SX rate = 2.5 lb ai/A
Soybean, Methyl parathion SX rate = 5 lb ai/A

⁷To convert lb ai/A to kg ai/ha, multiply lbs ai/A x 1.121

Table 10: Product Rate Determination (Continued)

Soybean Site Code	Test Substance & 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	Actual lb ai/A ^{4,7}	% of Target ^{5,6}
IA01	Fenitrothion 5X 08/22/04	14	1	150	31830	31980	118.13	249.1	29426.2	0.0689	112.8	2002.6	2.37	99
IA01	Fenitrothion 5X 08/29/04	14	2	150	31830	31980	119.59	249.6	29849.7	0.0689	114.5	2032.7	2.40	100
IA01	Fenitrothion 5X 09/06/04	14	3	162	34085	34247	101.3	286.9	29063.0	0.0689	111.4	1994.5	2.36	98
IA01	Fenitrothion 5X 09/12/04	14	4	162	34085	34247	102.87	283.1	29122.5	0.0689	111.7	1999.9	2.36	98

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 lb ai/A = $\frac{\text{Actual Rate mL}}{\text{Acre}} \times \frac{4.47 \text{ lb ai}}{\text{gallon}} \times \frac{1 \text{ gallon}}{3785 \text{ mL}}$

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

⁶Soybean, Fenitrothion 5X rate = 2.4 lb ai/A

⁷To convert lb ai/A to kg ai/ha, multiply lbs ai/A x 1.121

Table 10: Product Rate Determination (Continued)

Soybean Site Code	Test Substance & 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	Actual lb ai/A ^{4,7}	% of Target ^{5,6}
IA01	Dimethoate 1X 09/06/04	15	1	48	10440	10488	62.66	113.1	7086.8	0.0689	27.2	471.2	0.50	100
IA01	Dimethoate 1X 09/12/04	15	2	48	10500	10548	64.68	113.6	7347.6	0.0689	28.2	485.7	0.51	102
IA01	Methyl parathion 1X 09/06/04	15	1	95	7475	7570	46.41	113.1	5249.0	0.0689	20.1	954.7	1.0	100
IA01	Methyl parathion 1X 09/13/04	15	2	94	7510	7604	46.12	113.0	5211.6	0.0689	20.0	935.8	0.99	99

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 lb ai/A = $\frac{\text{Actual Rate mL}}{\text{Acres}} \times \frac{4 \text{ lb ai}}{\text{gallon}} \times \frac{1 \text{ gallon}}{3785 \text{ mL}}$

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

⁶Soybean, Dimethoate 1X rate = 0.5 lb ai/A
Soybean, Methyl parathion 1X rate = 1 lb ai/A

⁷To convert lb ai/A to kg ai/ha, multiply lbs ai/A x 1.121

Table 10: Product Rate Determination (Continued)

Soybean Site Code	Test Substance & 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	Actual lb ai/A ^{4,7}	% of Target ^{5,6}
IA01	Fenitrothion 1X 08/22/04	15	1	30	31950	31980	118.59	249.1	29540.8	0.0689	113.3	402.3	0.48	100
IA01	Fenitrothion 1X 08/29/04	15	2	30	31950	31980	119.5	249.6	29827.2	0.0689	114.4	406.2	0.48	100
IA01	Fenitrothion 1X 09/06/04	15	3	32	34200	34232	100.04	286.9	28701.5	0.0689	110.1	389.5	0.46	96
IA01	Fenitrothion 1X 09/12/04	15	4	34	34215	34249	103.3	283.1	29244.2	0.0689	112.1	421.2	0.50	104

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 lb ai/A = $\frac{\text{Actual Rate mL}}{\text{Acre}} \times \frac{4.47 \text{ lb ai}}{\text{gallon}} \times \frac{1 \text{ gallon}}{3785 \text{ mL}}$

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

⁶Soybean, Fenitrothion 1X rate = 0.48 lb ai/A

⁷To convert lb ai/A to kg ai/ha, multiply lbs ai/A x 1.121

Table 10: Product Rate Determination (Continued)

Wheat Site Code	Test Substance & 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	Actual lb ai/A ⁴	% of Target ⁵
ND02	Diquat 1X 08/24/04	17	1	108	5862	6000	132.06	40.7	5374.8	0.0918	15.5	1056.0	0.558	103
ND02	Diquat 5X 08/24/04	18	1	540	5430	6000	132.08	40.7	5375.7	0.0918	15.5	5280.1	2.790	104

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 lb ai/A = $\frac{\text{Actual Rate mL}}{\text{Acre}} \times \frac{2 \text{ lb ai}}{\text{gallon}} \times \frac{1 \text{ gallon}}{3785 \text{ mL}}$

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

⁶Wheat, Diquat 1X rate = 0.54 lb ai/A
Wheat, Diquat 5X rate = 2.68 lb ai/A

⁷To convert lb ai/A to kg ai/ha, multiply lbs ai/A x 1.121

Table 10: Product Rate Determination (Continued)

Soybean Site Code	Test Substance & 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	Actual lb ai/A ⁸	% of Target ^{6,7}
IA02	Diquat 1X 10/11/04	20	1	95	6390	6485	45.35	99.57	4515.5	0.0689	17.3	959.2	0.5 ⁴	100
IA02	Paraquat 1X 10/02/04	21	1	32	8360	8392	58.14	99.4	5779.1	0.0689	22.2	320.4	0.25 ⁵	100
IA02	Diquat 5X 10/11/04	22	1	475	6010	6485	44.88	99.57	4468.7	0.0689	17.1	4740.7	2.5 ⁴	100
IA02	Paraquat 5X 10/02/04	23	1	158	8240	8398	58.4	99.4	5805.0	0.0689	22.3	1588.0	1.26 ⁵	101

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 lb ai/A = $\frac{\text{Actual Rate mL}}{\text{Acre}} \times \frac{2 \text{ lb ai}}{\text{gallon}} \times \frac{1 \text{ gallon}}{3785 \text{ mL}}$

⁵Actual Rate lb ai/A = $\frac{\text{Actual Rate mL}}{\text{Acre}} \times \frac{3 \text{ lb ai}}{\text{gallon}} \times \frac{1 \text{ gallon}}{3785 \text{ mL}}$

⁶Percent of Target = $\frac{\text{Actual Rate (lb ai/A)}}{\text{Target Rate (lb ai/A)}} \times 100$

⁷Soybean, Diquat 1X rate = 0.5 lb ai/A
Soybean, Paraquat 1X rate = 0.25 lb ai/A
Soybean, Diquat 5X rate = 2.5 lb ai/A
Soybean, Paraquat 5X rate = 1.25 lb ai/A

⁸To convert lb ai/A to kg ai/ha, multiply lbs ai/A x 1.121

Table 11: Environmental Conditions at Application

Site Code/ Plot	Plot	Site Test Compound	Application No.	Application Date	Temp °F		Soil Surface	Winds		RH%	Crop Stage
					Air	Soil ¹		(mph)	Direction		
AR01	2	Diquat (1X)	1	09/26/04	66	78	Dry	0-1	E	80	Mature Harvest
		Carbaryl (1X)	1	09/10/04	68	84	Wet	0	None	98	21 Days PHI
	Carbaryl (1X)	2	09/17/04	70	85	Moist	2-3	N	93	14 Days PHI	
	3	Diquat (5X)	1	09/26/04	66	78	Dry	0-1	E	80	Mature Harvest
		Carbaryl (5X)	1	09/10/04	68	84	Wet	0	None	98	21 Days PHI
	4	Carbaryl (5X)	2	09/17/04	70	85	Moist	2-3	N	93	14 Days PHI
		Dimethoate (1X)	1	08/13/04	59	78	Wet	2-3	N	80	49 Days PHI
	4	Dimethoate (1X)	2	08/20/04	84	88	Wet	3-4	SW	85	42 Days PHI
		Dimethoate (1X)	3	08/27/04	84	94	Wet	2-3	SW	78	Heading, 35 Days PHI
	4	Dimethoate (1X)	4	09/03/04	78	88	Wet	0	None	94	Headed 28 Days PHI

¹Soil temperature taken at 2".

Table 11: Environmental Conditions at Application (Continued)

Site Code/ Plot	Plot	Site Test Compound	Application		Temp °F		Soil Surface	Winds		RH%	Crop Stage
			No.	Date	Air	Soil ¹		(mph)	Direction		
AR01 (cont)	4 (cont)	Methyl parathion (1X)	1	09/09/04	64	82	Wet	1-3	N	75	22 Days PHI
		Methyl parathion (1X)	2	09/16/04	74	87	Moist	2-3	SE	100	15 Days PHI
		Fenitrothion (1X)	1	08/27/04	84	94	Wet	2-3	SW	78	Heading, 35 Days PHI
		Fenitrothion (1X)	2	09/03/04	78	88	Wet	0	None	94	Headed 28 Days PHI
		Fenitrothion (1X)	3	09/10/04	68	84	Wet	0	None	98	21 Days PHI
	5	Dimethoate (5X)	1	08/13/04	59	78	Wet	2-3	N	80	49 Days PHI
		Dimethoate (5X)	2	08/20/04	84	88	Wet	3-4	SW	85	42 Days PHI
		Dimethoate (5X)	3	08/27/04	84	94	Wet	2-3	SW	78	Heading, 35 Days PHI
		Dimethoate (5X)	4	09/03/04	78	88	Wet	0	N/A	94	Headed 28 Days PHI
		Methyl parathion (5X)	1	09/09/04	64	82	Wet	1-3	N	75	22 Days PHI
		Methyl parathion (5X)	2	09/16/04	74	87	Moist	2-3	SE	100	15 Days PHI

¹Soil temperature taken at 2".

Table 11: Environmental Conditions at Application (Continued)

Site Code/ Plot	Plot	Site Test Compound	Application		Temp °F		Soil Surface	Winds		RH%	Crop Stage
			No.	Date	Air	Soil ¹		(mph)	Direction		
AR01 (cont)	5 (cont)	Fenitrothion (5X)	1	08/27/04	84	94	Wet	2-3	SW	78	Heading, 35 Days PHI
		Fenitrothion (5X)	2	09/03/04	78	88	Wet	0	N/A	94	Headed 28 Days PHI
		Fenitrothion (5X)	3	09/10/04	68	84	Wet	0	None	98	21 Days PHI
ND01	7	Diquat (1X)	1	09/12/04	69	62	Dry	5	S	74	Matured and Normal
		Diquat (5X)	1	09/12/04	69	62	Dry	5	S	74	Matured and Normal
	9	Dimethoate (5X)	1	09/06/04	61	60	Wet	6	W	56	Late Dough/healthy
		Dimethoate (5X)	2	09/12/04	69	62	Dry	5	S	74	Matured and Normal
		Methyl parathion (5X)	1	08/28/04	70	70	Dry	2	NW	43	Soft dough/healthy
	9	Methyl parathion (5X)	2	09/04/04	71	70	Dry	2	NE	85	Late dough/healthy
		Fenitrothion (5X)	1	09/13/04	78	75	Dry	4	SE	60	Matured and Normal

¹Soil temperature taken at 2".