

Entomology Appendix A.: Agronomic and Rainfall Information for Research Sites

Location:	St. Thomas (Pembina County), ND – William and Brent Baldwin Farm	
Sugarbeet Variety:	Betaseed 87RR38 All experiments	
Plot Size:	Six 35-ft long rows, 4 center rows treated	
Design:	Randomized complete block, 4 replicates	
Soil Name:	Glyndon Silt Loam	
Soil Test:	Organic Matter = 4%; pH = 7.9	
Soil Texture:	42.5% sand	15.0% silt 42.5% clay
Previous Crop:	Potatoes - 2009	
Soil Preparation:	Field cultivator	
Herbicide:	Roundup PowerMax (28 fl oz/ac), June 22, 2010	
Planting Depth:	1.25"	
Planting Date	May 12, 2010	Roundup/Foliar Insecticide Tank-mix test
	May 13, 2010	Thimet Timing and Rate test
	May 14, 2010	Planting-time Granules, Seed Treatments & Postemergence Granules test
Postemergence Insecticide Trts.:	June 03, 2010	Thimet and Counter 20G (1 day pre-peak); Planting-time Granules, Seed Treatments & Postemergence Granules test
		Thimet and Counter 20G (1 day pre-peak); Thimet Timing and Rate test
	June 07, 2010	Thimet 20G (3 days post-peak); Thimet Timing and Rate test
	June 09, 2010	Lorsban Advanced & Vydate (5 days post-peak); Roundup/Foliar Insecticide Tank-mix test
	June 14, 2010	Lorsban Advanced (10 days post-peak); Thimet Timing and Rate test
Rainfall:	May 13, 2010	0.03"
	May 22, 2010	0.18"
	May 23, 2010	0.19"
	May 24, 2010	2.28"
	May 29, 2010	0.69"
	May 30, 2010	0.55"
	Total/May	3.92"
	June 01, 2010	0.03"
	June 03, 2010	0.45"
	June 05, 2010	0.35"
	June 08, 2010	0.33"
	June 10, 2010	0.27"
	June 17, 2010	0.74"
	June 18, 2010	0.37"
	June 20, 2010	0.05"
	June 21, 2010	0.19"
	June 25, 2010	0.50"
	June 27, 2010	0.05"
	Total/June	3.33"

July 05, 2010	0.04"
July 13, 2010	0.99"
July 14, 2010	0.15"
July 22, 2010	1.55"
July 27, 2010	0.05"
July 30, 2010	0.76"
Total/July	3.54"
Total/August	2.68"
Total/September	5.10"

Harvest Sample Size: 2 center rows x 35' long - 70' total

Location: Prosper (Cass County), ND – NDSU Research Farm

Sugarbeet Variety: Betaseed 87RR38

Plot Size: Springtail plots were two 35-ft long rows
Roundup Tank-mix plots were six 35-ft long rows, 4 center rows treated

Design: Randomized complete block, 4 replicates

Soil Name: Perella/Bearden Silty Clay Loam

Soil Test: Organic Matter = 3.9%; pH = 6.8

Soil Texture: 30.0% sand 32.5% silt 37.5% clay

Previous Crop: Wheat – 2009

Soil Preparation: Field cultivator

Herbicide: Roundup PowerMax (28 fl oz/ac), June 14, 2010 & June 29, 2010

Planting Depth: 1.25"

Planting Date: May 27, 2010 Roundup / Foliar Insecticide Tank-mix test
May 28, 2010 Planting-time Granules, Liquids & Seed Treatments test

Postemergence
Insecticide Trts.: June 24, 2010 Lorsban Advanced & Vydate; Roundup / Foliar Insecticide Tank-mix test

Rainfall:

May 27, 2010	0.04"
Total/May	0.04"
June 03, 2010	0.25"
June 08, 2010	0.15"
June 10, 2010	0.12"
June 11, 2010	0.10"
June 15, 2010	0.76"
June 17, 2010	0.84"
June 21, 2010	0.07"
June 22, 2010	0.10"
June 25, 2010	0.06"
June 26, 2010	0.72"
Total/June	3.18"
July 04, 2010	0.14"
July 13, 2010	0.72"
July 14, 2010	1.02"
July 19, 2010	0.11"
July 20, 2010	0.36"
July 22, 2010	0.47"
July 27, 2010	1.25"
Total/July	4.07"
Total/August	3.52"
Total/September	5.30"

Harvest Sample Size: 2 rows x 35' long - 70' total & 2 center rows x 35' long - 70' total

Location: Minto (Walsh County), ND – Brad Narloch Farm

Sugarbeet Variety: Betaseed 87RR38 All experiments

Plot Size: Six 35-ft long rows, 4 center rows treated

Design: Randomized complete block, 4 replicates

Soil Name: Fargo silty clay

Soil Test: Organic Matter = 5.3%; pH = 7.8

Soil Texture: 10.0% sand 26.2% silt 63.8% clay

Previous Crop: Wheat - 2009

Soil Preparation: Field cultivator

Herbicide: Roundup PowerMax (28 fl oz/ac), June 16, 2010

Planting Depth: 1.25"

Planting Date: May 20, 2010

Postemergence
Insecticide Trts.: June 15, 2010 Lorsban Advanced (11 days post-peak); Planting-time Granules, Liquids,
Seed Treatments & Post Liquids test

Rainfall:

May 22, 2010	0.40"
May 24, 2010	1.66"
May 29, 2010	0.81"
May 30, 2010	0.42"
Total/May	3.29"
June 03, 2010	0.36"
June 10, 2010	0.54"
June 17, 2010	0.68"
June 21, 2010	0.18"
June 24, 2010	0.66"
June 25, 2010	1.11"
Total/June	3.53"
July 07, 2010	0.11"
July 13, 2010	0.64"
July 14, 2010	0.19"
July 22, 2010	0.72"
July 26, 2010	0.51"
July 27, 2010	0.57"
July 31, 2010	0.64"
Total/July	3.38"
Total/August	1.89"
Total/September	4.06"

Harvest Sample Size: 2 rows x 35' long - 70' total & 2 center rows x 35' long - 70' total

Location: Fairmont (Richland County), ND – Larry Miller Farm

Sugarbeet Variety: Betaseed 87RR38

Plot Size: Two 35-ft long rows

Design: Randomized complete block, 4 replicates

Soil Name: Gilby Silt Loam

Soil Test: Organic Matter = 3.4 %; pH = 7.7

Soil Texture: 35.0% sand 22.5% silt 42.5% clay

Previous Crop: Wheat - 2009

Soil Preparation: Field cultivator

Herbicide: Roundup PowerMax (28 fl oz/ac), June 21, 2010

Planting Depth: 1.25"

Planting Date: May 21, 2010 Planting-time Granules, Liquids & Seed Treatments test

Rainfall:

May 22, 2010	0.58"
May 24, 2010	0.75"
May 30, 2010	0.09"
Total/May	1.42"
June 03, 2010	0.39"
June 08, 2010	0.16"
June 10, 2010	0.26"
June 11, 2010	0.10"
June 12, 2010	0.23"
June 14, 2010	0.26"
June 15, 2010	0.84"
June 17, 2010	0.26"
June 25, 2010	0.62"
June 27, 2010	0.25"
Total/June	3.37"
July 04, 2010	0.94"
July 06, 2010	0.13"
July 07, 2010	0.12"
July 08, 2010	0.14"
July 14, 2010	1.22"
July 20, 2010	0.69"
July 22, 2010	0.30"
July 23, 2010	0.06"
July 27, 2010	0.29"
Total/July	3.89"
Total/August	3.41"
Total/September	4.74"

Harvest Sample Size: 2 rows x 35' long - 70' total & 2 center rows x 35' long - 70' total

Location: Moorhead (Clay County), MN – Jim Koester Farm

Sugarbeet Variety: Betaseed 87RR38

Plot Size: Six rows 35-ft long, 4 center rows treated

Design: Randomized complete block, 4 replicates

Soil Name: Bearden Silty Clay Loam

Soil Test: Organic Matter = 4.8%; pH = 7.9

Soil Texture: 35.0% sand 6.2% silt 58.8% clay

Previous Crop: Wheat - 2009

Soil Preparation: Field cultivator

Herbicide: Roundup PowerMax (28 fl oz/ac), June 29, 2010

Planting Depth: 1.25"

Planting Date: June 02, 2010 Roundup / Foliar Insecticide / Quadris Tank-mix test

Postemergence Trts.: July 9, 2010 Roundup / Foliar Insecticide / Quadris Tank-mix test

Rainfall:

June 03, 2010	0.33"
June 05, 2010	0.06"
June 08, 2010	0.09"
June 10, 2010	0.12"
June 11, 2010	0.59"
June 12, 2010	0.15"
June 14, 2010	0.26"
June 15, 2010	0.29"
June 17, 2010	0.74"
June 22, 2010	0.05"
June 25, 2010	0.13"
June 26, 2010	0.33"
June 27, 2010	0.24"
Total/June	3.38"
July 03, 2010	0.27"
July 04, 2010	0.31"
July 13, 2010	0.42"
July 14, 2010	0.86"
July 20, 2010	0.39"
July 23, 2010	0.09"
July 24, 2010	0.10"
July 27, 2010	1.70"
Total/July	4.14"
Total/August	2.65"
Total/September	5.98"

Harvest Sample Size: 2 rows x 35' long - 70' total & 2 center rows x 35' long - 70' total