

Entomology Appendix A.: Agronomic, Rainfall, and Plot Maintenance Information

Location:	St. Thomas (Pembina County), ND –Lessard Farms – <i>Sugarbeet Root Maggot Trials</i> 48.5645937N, -97.4580947W	
Seed variety:	Betaseed 8018 CR+	
Plot size:	Six 35-ft long rows, 4 center rows treated	
Design:	Randomized complete block, 4 replications	
Soil name:	Glyndon silt loam	
Soil test:	Organic matter = 4.0%	pH = 8.0
Soil texture:	41.0% sand	41.0% silt 18.0% clay
Previous crop:	Wheat (2022)	
Soil preparation:	Field cultivator (1x)	
Planting depth:	1.25"	
Rescue insecticide (plot maintenance):	June 26	Mustang Maxx (4 fl oz/ac) applied to all plots to control armyworm/cutworm infestation
Herbicides applied:	June 11	Roundup PowerMAX (32 fl oz/ac) + Class Act NG (2.5% v/v) + Interlock (6 fl oz/ac)
	July 13	Roundup PowerMAX (32 fl oz/ac) + Gateway Plus (2.5% v/v) + Interlock (6 fl oz/ac)
Rainfall (after seedbed preparation):	May 29	0.55"
	May 30	0.14"
	May 31	0.44"
	Total/May	1.13"
	June 1	0.01"
	June 4	0.17"
	June 5	0.07"
	June 6	0.01"
	June 7	0.01"
	June 9	0.16"
	June 7	0.01"
	June 7	0.01"
	June 22	0.17"
	June 23	0.02"
	June 24	3.45"
	June 25	1.10"
	June 26	0.10"
	June 28	0.26"
	Total/June	5.46"

July 6	0.08"
July 13	0.04"
July 18	0.04"
July 23	0.10
July 25	0.04"
July 26	0.03"
Total/July	0.33"
August 1	0.04"
August 8	0.02"
August 10	0.06"
August 11	0.04"
August 13	0.01"
August 20	0.03"
August 21	0.62"
August 24	0.08"
August 27	0.08"
Total/August	0.98"
September 4	0.41"
September 5	0.44"
September 10	0.01"
September 11	0.27"
September 14	0.01"
September 21	0.28"
September 22	0.17"
September 23	0.24"
September 24	0.20"
September 25	0.01"
September 29	0.01"
Total/September	2.05"

Damage ratings: July 26-7; August 1

Harvest date: October 2

Yield sample size: 2 center rows x 35 ft length (70 row-ft total)

Location: Prosper (Cass County), ND – NDSU Experiment Farm
47.00050N, -97.11066W

Seed variety: Betaseed 8018 CR+

Plot size: Two 25-ft long rows

Design: Randomized complete block, 4 replications

Soil name: Kindred-Bearden silty clay loam

Soil test: Organic matter = 3.8% pH = 7.8

Soil texture: 32.5% sand 40.5% silt 27.0% clay

Previous crop: Wheat (2022)

Soil preparation: Field cultivator (2x)

Planting depth: 1.25"

Planting date: July 7

Postemergence insecticide trt.: Aug. 4 Movento HL

Rescue insecticide (plot maintenance): July 28 Mustang Maxx (3 fl oz/ac) applied to all plots to control flea beetle infestation (tank mixed with herbicide application #1)

Herbicides applied: July 28 Roundup PowerMAX (32 fl oz/ac) + Gateway Plus (2.5% v/v) + Interlock (6 fl oz/ac)
August 23 Roundup PowerMAX (32 fl oz/ac) + Induce (1% v/v) + Interlock (6 fl oz/ac)

Fungicides applied: August 23 Agri Tin (8 fl oz/ac) + Badge SC (2 pts/ac)

Rainfall: July 11 0.08"
(after seedbed July 12 0.02"
preparation): July 13 0.02"
July 21 0.01"
July 25 0.21"
July 28 0.03"
July 30 0.01"
Total/July **0.38"**
August 5 0.78"
August 6 0.04"
August 8 0.02"
August 10 0.02"
August 11 0.16"
August 13 1.44"
August 15 0.01"
August 21 0.02"
August 24 0.02"

August 27	0.02”
August 31	0.04”
Total/August	2.57”
September 4	0.01”
September 5	0.02”
September 11	0.15”
September 14	0.01”
September 20	0.15”
September 21	0.08”
September 22	0.03”
September 23	0.95”
September 24	0.23”
September 25	0.15”
September 29	0.07”
Total/September	1.85”
October 4	0.14”
October 5	0.04”
October 6	0.15”
Total/October	0.33”

Stand counts: T1 – July 21 and July 28, and August 4 (14, 21, and 28 days after planting)

Harvest date: October 10

Yield sample size: 2 rows x 25 ft length (50 row-ft total)