

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

Location:	St. Thomas (Pembina County), ND – Wayne Lessard Farm – <i>Sugarbeet Root Maggot Trials</i>	
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 = 3.2%	pH = 8.1
Soil texture:	19.0% sand	62.0% silt 19.0% clay
Previous crop:	Wheat (2017)	
Soil preparation:	Field cultivator (1x)	
Planting depth:	1.25"	
Herbicides applied:	June 4	Roundup PowerMAX (32 fl oz/ac) + Veracity Elite (3 qt/100 gal)
	June 27	Cornerstone 5 Plus (1.5 pt/ac) + Interlock (6 fl oz/ac) + Class Act NG (2.5% v/v)
Rainfall (after seedbed preparation):	May 17	0.09"
	May 18	1.13"
	May 23	0.38"
	May 27	0.04"
	May 30	0.34"
	Total/May	1.61"
	June 1	0.76"
	June 2	0.06"
	June 8	0.89"
	June 11	0.21"
	June 14	0.37"
	June 15	0.44"
	June 23	0.45"
	June 25	0.10"
	June 29	0.40"
	Total/June	3.68"
	July 1	0.39"
	July 3	0.04"
	July 4	0.85"
	July 8	0.01"
	July 26	0.37"
	July 29	0.21"
	Total/July	1.87"
	Total/August	0.57"
	Total/September	1.73"
Damage ratings:	July 30-31	
Harvest date:	September 24-25	
Yield sample size:	2 center rows x 35 ft length (70 row-ft total)	

Location: Thompson (Grand Forks County), ND – Tim Myron Farm – *Sugarbeet Root Maggot Trials*

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: 2.6% sand 70.4% silt 27.0% clay

Previous crop: Potatoes (2017)

Soil preparation: Field cultivator (1x)

Planting depth: 1.25"

Herbicides applied: June 20 Roundup PowerMAX (32 fl oz/ac) + Veracity (3 qt/100 gal)

Fungicide applied: Aug 23 Agritin (5 fl oz/ac) + Activator 90 (2 pt/100 gal) + Surfactant (3.2 fl oz/ac)

Rainfall
(after seedbed
preparation):

May 17	0.66"
May 18	0.17"
May 27	0.14"
May 27	0.11"
Total/May	1.08"
June 1	0.47"
June 2	0.10"
June 5	0.48"
June 8	1.62"
June 11	1.42"
June 17	0.13"
June 23	0.32"
June 24	0.31"
June 29	0.40"
Total/June	5.25"
July 1	0.10"
July 3	1.15"
July 4	0.51"
July 8	0.18"
July 22	0.93"
Total/July	2.87"
Total/August	1.34"
Total/September	2.48"

Damage ratings: August 2

Harvest date: September 20

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

Location: Prosper (Cass County), ND – NDSU Experiment Farm – *Springtail Management Trial*

Plot size: Two 25-ft long rows

Design: Randomized complete block, 4 replications

Soil name: Bearden-Lindaas silty clay loam

Soil test: Organic matter = 3.8% pH = 8.1

Soil texture: 16.3% sand 52.0% silt 31.7% clay

Previous crop: Wheat (2017)

Soil preparation: Field cultivator (2x)

Planting depth: 1.25"

Herbicides applied: May 31 Roundup PowerMAX (32 fl oz/ac) + Class Act NG (2.5% v/v)
 June 19 Roundup PowerMAX (32 fl oz/ac) + Class Act NG (2.5% v/v)

Fungicides applied: May 29 Quadris (14.3 fl oz ac)
 June 19 Quadris (14.3 fl oz ac)
 July 13 Agritin (8 oz/ac) + Topsin 4.5FL (10 fl oz/ac)
 July 27 Agritin (8 oz/ac) + Inspire XT (7 fl oz/ac)
 Aug 10 Badge SC (2 pt/ac) + Manzate (1.6 qt/acre)
 Aug 30 Supertin (8 fl oz/ac) + Proline (5.7 fl oz/ac) + Prefer 90 (0.125% v/v)

Rainfall: May 17 1.15"
 (after seedbed May 27 0.15"
 preparation): May 30 0.32"
 Total/May **1.62"**
 June 2 0.18"
 June 5 0.64"
 June 11 1.01"
 June 16 0.32"
 June 23 0.20"
 June 24 0.16"
 June 29 0.61"
 Total/June **3.12"**
 July 2 0.31"
 July 3 0.37"
 July 4 0.75"
 July 6 0.12"
 July 10 0.23"
 July 19 0.54"
 July 22 0.17"
 July 25 0.08"
 Total/July **2.57"**
 Total/August **2.99"**
 Total/September **1.17"**

Stand counts: June 5 and 29; July 5

Harvest date: September 18

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