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

Location: St. Thomas (Pembina County), ND – Wayne Lessard Farm – Sugarbeet Root Maggot Trials

Seed variety: Betaseed BTS 8524 RP

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 = 3.0% pH = 8.0

Soil texture: 29.1% sand 48.5% silt 22.4% clay

Previous crop: Wheat (2019)

Soil preparation: Field cultivator (2x)

Planting depth: 1.25"

Herbicides applied: June 12 Cornerstone 5 Plus (1.5 pt/ac) + Class Act NG (2.5% v/v) +

Interlock (6 fl oz/ac)

June 29 Cornerstone 5 Plus (1.5 pt/ac) + Outlook (17 fl oz/ac) +

Class Act NG (2.5% v/v) + Interlock (6 fl oz/ac)

Fungicides applied: Aug 13 Agri Tin (8 fl oz/ac) + Topsin (10 fl oz/ac)

Aug 31 Priaxor Xemium (6.7 fl oz/ac) + Badge SC (1 pt/ac)

Rainfall 0.07" May 24 0.07" (after seedbed Total/May preparation): June 3 0.11" June 4 0.01" June 6 0.07"June 7 1.58" June 8 0.91" 0.01" June 9 June 10 0.03" June 11 0.01" June 17 0.16" June 20 0.72" June 25 0.15" 0.20" June 26 June 30 2.5" Total/June 6.46" July 1 0.05" July 6 0.11" July 8 0.60"July 9 0.08"July 13 0.62" July 17 1.50" July 24 0.20"

July 25	0.36"
Total/July	3.52"
August 9	0.20"
August 14	0.22"
August 20	0.01"
August 30	0.10"
Total/August	0.53"
September 2	0.08"
September 3	0.13"
Total/September	0.21"

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

Location: Fairview (Richland County), MT – Pat Asbeck Farm – *Springtail Trial*

Seed variety: Betaseed BTS 8524 RP

Plot size: Two 25-ft long rows

Design: Randomized complete block, 4 replications

Soil name: Turner-Beaverton complex

Soil texture: 48.2% sand 36.6% silt 15.2% clay

Soil test: Organic matter = 3.0% pH = 8.0

Previous crop: Wheat (2019)

Soil preparation: Disc ripped (1x)

Surface leveled (1x)

Ridged (1x)

Planting depth: 1.25"

Planting date: May 7

Herbicides applied: May 14 Roundup PowerMAX (32 fl oz/ac) + Hel-fire (1 qt/100 gal)

June 8 Roundup PowerMAX (32 fl oz/ac) + Hel-fire (1 qt/100 gal)
July 22 Roundup PowerMAX (22 fl oz/ac) + Class Act NG (2.5% v/v) +

Interlock (6 fl oz/ac)

Fungicides applied: August 20 Minerva (13 fl oz/ac)

 Rainfall:
 May 8
 0.05"

 (after seedbed preparation):
 May 9
 0.01"

 May 12
 0.07"
 May 13
 0.08"

 May 23
 0.64"

May 24 0.32" May 26 0.01" **Total/May** 1.18" June 6 0.01"

June 7 0.01"

June 18	0.01"
June 19	0.05"
June 25	0.01"
June 27	0.05"
June 28	0.50"
June 29	0.09"
June 30	0.32"
Total/June	1.05"
July 3	0.17"
July 7	0.45"
July 8	0.01"
July 10	0.04"
July 18	0.32"
July 23	0.22"
July 25	0.01
Total/July	1.22"
August	0.02"
August	0.13"
August	0.07"
August	0.69"
Total/August	0.91"
September 7	0.29"
Total/September	0.29"

Stand counts: 25-ft of row, counted on June 1 (25 DAP), 9 (33 DAP), and 15 (39 DAP)

Harvest date: September 24

Yield sample size: One 10.9 linear row ft sample collected from each row of each two-row plot.