Entomology Appendix A.: Agronomic Information for Research Sites

Location: St. Thomas, ND (Pembina County) – William and Brent Baldwin Farm

Sugarbeet Variety: Beta 1305R (20 tach) Vydate trial

Experimental Seed Treatment tests I & III

Hilleshog Experimental Seed Treatment test II

VDH 46519 Replanting test

Planting-time granules & liquids study

Granule Placement trial Thimet timing and rate trial

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

Experimental Design: Randomized complete block, 4 replicates

Soil Name: Glyndon Silt Loam

Soil Test: Organic Matter = 3.3%; pH = 7.7

Previous Crop: { ADVANCE \1 1} Potatoes - 2005

Soil Preparation: Field cultivator, worked once

Herbicide: Progress (5.7 fl oz/A) + UpBeet (1/8 oz/A) + Stinger (1.3 fl)

oz/A) + Quad 7 (1%) + MSO (1%), May 22, 2006

Progress (5.7 fl oz/A) + UpBeet (1/8 oz/A) + Stinger (1.3 fl oz/A) + MSO

(1.5%),

May 29, 2006

Progress (5.7 fl oz/A) + UpBeet (1/8 oz/A) + Stinger (1.3 fl oz/A) + Select

(2 fl oz/A) +

MSO (1.5%), June 3, 2006

Progress (8.7 fl oz/A) + UpBeet (1/8 oz/A) + Stinger (1.3 fl oz/A) + Select

(6 fl oz/A) +

MSO (1.5%), June 11, 2006

Betanex (16 fl oz/A) + UpBeet (1/8 oz/A) + Select (6 fl oz/A) + MSO

(1.5%),

June 28, 2006

Insecticide: Noble applicators, granules; 5-inch band (B), modified in furrow (M), and

spoon (S)

Liquid metering device (Raven), liquids; 5-inch band over open seed furrow

(TB), directly in seed furrow (IF)

CO² mounted liquid application, postemergence liquids; 7- and 11-inch band

Planting Depth: 1.25"

Planting Date: May 05, 2006 Replanting test (insecticide only)

May 09, 2006 Experimental Seed Treatment test I and postemergence

liquid insecticide

Experimental Seed Treatment tests II and III

Thimet timing and rate trial

Lorsban postemergence timing, rates, and band width trial

May 12, 2006 Vydate trial

May 15, 2006 Granule Placement trial

May 18, 2006 Planting-time granules and liquids study

May 24, 2006 Replanting test

Post Treatments: June 02, 2006 Thimet; Thimet postemergence granule timing and rate trial

(14-day pre-peak)

June 06, 2006 Lorsban 4E; Thimet timing and rate trial (2-to 4-day pre-

peak)

Asana & Vydate; Vydate trial (2-to 4-day pre-peak)

Vydate + Herbicide micro-rates; Vydate trial (2-to 4-day

pre-peak)

Lorsban 4E; Experimental Seed Treatment test I and liquid

insecticide

trial (2-to 4-day pre-peak)

June 07, 2006 Lorsban 4E; Lorsban postemergence liquid trial (2-to 4-day

pre-peak)

Lorsban 4E; Replanting test

June 09, 2006 Thimet; Thimet postemergence granule timing and rate trial

(7-day pre-peak)

June 12, 2006 Asana and Vydate; Vydate trial (2-to 3-day post-peak)

Lorsban 4E; Replanting test

Lorsban 4E; Lorsban postemergence liquid trial (2-to 3-day

post-peak)

Rainfall: May 07, 2006 0.18"

May 08, 2006 0.22" May 10, 2006 0.08" May 13, 2006 0.09" May 24, 2006 0.05" May 27, 2006 0.06"

June 05, 2006 0.06"

0.68"

Total/May

June 09, 2006 0.00"

June 18, 2006 0.09"
June 21, 2006 0.02"
June 23, 2006 0.18"
June 30, 2006 0.09" **Total/June 0.64"**July 01, 2006 0.04"
July 02, 2006 0.19"
July 07, 2006 0.25"
July 08, 2006 0.21"

July 11, 2006 0.03" July 25, 2006 0.06" July 30, 2006 0.50" July 31, 2006 0.06"

Total/July 1.34"

{ ADVANCE \r 1} Total/August 3.23"

Total/September 1.08"

Stand Counts: May 25; June 8, 9, 12, 22; Sept. 19 & 20; Oct. 5 & 13, 2006

Damage Ratings: August 1, 2, 3, & 7, 2006 Harvest: September 19 & 20, 2006

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

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

Sugarbeet Variety: Beta 1305 R (20 tach) Experimental Seed Treatment test

VDH 46519 Granule Placement

Beta 1305 R (45 tach) Insecticide/Fungicide Tank-mix trial

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

Experimental Design: Randomized complete block, 4 replicates

Soil Name: Clay Loam

Soil Test: Organic Matter = 3.7%; pH = 7.6 Previous Crop: { ADVANCE \l 1} Wheat - 2005 Soil Preparation: Field cultivator, worked twice

Herbicide: Progress (11.6 fl oz/A) + UpBeet (1/8 oz/A) + Stinger (1.3 fl oz/A) +

Select (6 fl oz/A) + MSO (1.5%), May 29, 2006

Progress (5.7 fl oz/A) + UpBeet (1/8 oz/A) + Stinger (1.3 fl oz/A) + Select

(2 fl oz/A) +

MSO (1.5%), June 3, 2006

Progress (5.7 fl oz/A) + UpBeet (1/8 oz/A) + Stinger (1.3 fl oz/A) + Select

(2 fl oz/A) +

MSO (1.5%), June 12, 2006

Progress (11.6 fl oz/A) + UpBeet (1/2 oz/A) + Stinger (1.3 fl oz/A) + Select

(8 fl oz/A) +

+ MSO (1.5%), June 12, 2006 (Insecticide/Fungicide Tank-mix trial only)

Betanex (16 fl oz/A) + UpBeet (1/2 oz/A) + Stinger (2.6 fl oz/A) + Select (6 oz/A)

fl oz/A) +

+ MSO (1.5%), June 20, 2006 (Insecticide/Fungicide Tank-mix trial only)

Fungicide: Eminent (13 fl oz/ac), July 24, 2006

Headline (9 fl oz/ac), August 21, 2006

Insecticide: Postemergence liquids; broadcast, CO²-driven

Planting Depth: 1.25"

Planting Date: May 16, 2006 Insecticide/Fungicide Tank-mix trial

May 23, 2006 Coded Seed Trial

May 26, 2006 Granule Placement and Experimental Seed Treatment test

Post Treatments: Sept 02, 2006 Lannate, Lorsban 4E, Malathion, Asana, Headline, Eminent,

and Super Tin; Insecticide/Fungicide Tank-mix trial

Rainfall: May 23, 2006 0.08"

May 24, 2006 0.18" May 31, 2006 0.30" **Total/May 0.56"** June 09, 2006 0.15" June 16, 2006 0.10" June 24, 2006 0.23" **Total/June 0.48"** July 07, 2005 0.11" July 24, 2005 0.19"

July 25, 2005 1.17"

July 28, 2005 0.83" July 29, 2005 0.30" Total/July 2.60"

Total/August 0.98" { ADVANCE \r 1}

Total/September 3.75"

Harvest:

September 28, 2006 2 rows x 35' long - 70' total Harvest Sample: