Managing Sugarbeet Diseases in 2018
Disease factors and concerns

• Weather
  • Environmental conditions translate into disease development

• Diagnosis
  • Accurate disease identification is essential to effective treatment

• Yield losses
  • Protecting your bottom line

• Treatment
  • Choosing the best option while managing cost

• Resistance management
  • Controlling disease with limited treatment options
Cercospora leaf spot

• Spores overwinter on infected beet leaves and crop residue
• Spread by wind and water
• Identified by small, circular spots with dark borders and tiny black dots in the center
• Decreases sugarbeet yields by up to 30%
The bottom-line effect of Cercospora leaf spot on sugarbeets

- Yield: 26 tons/A
- CLS incidence: 20%
- Yield Loss: 5.2 tons/A
- Profit Loss: $218 Per Acre at $42/ton
Powdery mildew

• Spread by wind
• Germination increases with humidity
• Identified initially by small, scattered, circular mats, evolving to a dusty white appearance as disease progresses
• Disease is recurring and pervasive, resulting in recoverable white sugar (RWS) losses of 30% - 35%
Management opportunities

• Integrated Pest Management (IPM)
  • Multi-pronged approach to disease management provides more opportunities to address problems

• Rotation
  • Minimizes pathogen problems

• Variety choice and seed treatments
  • Essential to IPM, but alone, does not provide complete control

• Treatment
  • Highly effective, fast-acting, affordable chemicals are available

• Disease prediction models based on current weather conditions
A proven fungicide portfolio

• **Minerva®**
  - Tetraconazole
  - Rate: 13 fl. oz./A

• **Minerva® Duo**
  - Tetraconazole + triphenyltin hydroxide
  - Rate: 16 fl. oz./A

• **Brixen™**
  - Tetraconazole + azoxystrobin
  - Rate: 19 – 21 oz./A
Minerva® fungicide

- Ideal for first foliar fungicide spray
- Contains tetraconazole
  - Premier triazole for sugarbeet disease management
- Minerva is cost-effective, to achieve maximum ROI
Minerva® is fast and lasting

- Fast-acting tetraconazole
  - Quickly absorbed and redistributed through the plant for maximum disease protection
- Long-lasting disease protection
  - Product pools in crown, extending protection to new growth up to two weeks
Minerva® is fast and lasting

Minerva® fungicide distributes quickly throughout the plant to provide fast, long-lasting disease control.
Minerva® is flexible

• Flexible
  • Ground and aerial application, aerial application with low volume of water (3 gal/A)
  • Fits in all tank mix programs recommended by universities and sugar companies
  • Excellent tank mix partner with other pesticides, including Mancozeb, TPTH, Copper, Glyphosate
  • Rainfall resistant
Minerva® is powerful

• Powerful
  • Provides preventative, curative, systemic activity

• Proven
  • In field trials, Minerva demonstrates excellent control of Cercospora leaf spot, powdery mildew and ramularia — and presents no risk of crop injury
  • Minerva fits with the 2018 sugarbeet production recommendations* from Southern Minnesota Beet Sugar Cooperative, Michigan Sugar, and American Crystal Sugar

*2018 recommendations from MinnDak, Sidney Sugars, and Western Sugar have not yet been released
Minerva® is proven

Southern Minnesota Beet Sugar Cooperative
2015 Cercospora leaf spot trial
Raymond, MN

Extractable sugar increased 1,599 lbs./A over untreated check

Minerva Program: 1st Application: Minerva (13 oz./A); 2nd Application: Super Tin (8 oz./A) + Manzate (1.5 lb./A); 3rd Application: Headline (9 oz./A)
Inspire XT Program: 1st Application: Inspire XT (7 oz./A); 2nd Application: Super Tin (8 oz./A) + Manzate (1.5 lb./A); 3rd Application: Headline (9 oz./A)
Proline Program: 1st Application: Proline (5.77 oz./A); 2nd Application: Super Tin (8 oz./A) + Manzate (1.5 lb./A); 3rd Application: Headline (9 oz./A)

ROI calculation based on 2017 program price average
Minerva® Duo fungicide

• A winning combination of two powerful active ingredients
  • Tetraconazole and triphenyltin hydroxide

• Ready to go formulation
  • Versatile pre-mix delivers preventative and curative activity

• Multi-site action
  • Unique formulation reduces the risk of fungicide resistance
Minerva® Duo is powerful

• Best ROI according to 2017 Michigan Research Report
  • Boosts extractable sugar and yields

• Outperforms competitors

• Minerva Duo fits with the 2018 sugarbeet production recommendations* from Michigan Sugar and American Crystal

*2018 recommendations from MinnDak, Sidney Sugars, and Western Sugar have not yet been released
Minerva® Duo is proven

Michigan State University
2015 Sugarbeet Cercospora leaf spot trial
Richville, MI

Extractable sugar increased 2,279 lbs./A over untreated check

Minerva Duo Program: 1st Application: Minerva Duo (16 oz./A); 2nd Application: Super Tin (8 oz./A) + Manzate (1.5 lb./A); 3rd Application: Headline (9 oz./A)
Inspire XT Program: 1st Application: Inspire XT (7 oz./A); 2nd Application: Super Tin (8 oz./A) + Manzate (1.5 lb./A); 3rd Application: Headline (9 oz./A)
Proline Program: 1st Application: Proline (5.77 oz./A); 2nd Application: Super Tin (8 oz./A) + Manzate (1.5 lb./A); 3rd Application: Headline (9 oz./A)

*ROI calculation based on 2017 program price average
New Brixen™ fungicide

• Premium fungicide with broad-spectrum disease control
• Two powerful ingredients in single formulation
  • Tetraconazole and Azoxystrobine
• Preventative and curative fungicide with system properties
• Controls Cercospora leaf spot, powdery mildew, and ramularia
• Proven through field trials
Brixen™ is proven

North Dakota State University
2017 Sugarbeet Cercospora leaf spot trial
Foxhome, MN

1. Brixen 21 oz./A; Minerva Duo 16 oz./A; SuperTin 8oz. + Koverall 1.5 lb./A
2. Untreated Check
About Sipcam Agro USA


• Extensive portfolio
• Proven track record
• Budget friendly
• Innovative

You never quit. Neither do we.

Questions? Call 877-898-9514, or email customerservice@sipcamagro.com.

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