

FUNGICIDES



Al: Azoxystrobin FRAC CODE: ||

Arius $^{\mathtt{M}}$ 250 is a systemic fungicide offering long-lasting broad-spectrum control of yield-robbing diseases.

» Controls tough diseases like Rhizoctonia stem canker and crown rot

» Registered for use on a wide range of crops

» Offers application flexibility

APPLICATION RATE: 0.40 - 0.80 fl. oz/1,000 row ft.;

apply in a 3"-7" band at the 2 to 8 leaf stage.

TIMING: First spray of season and consecutive ones

PHI: 14 days
PACKAGING: 2 x 2.5 gal. case





Al: Tetraconazole, azoxystrobin **FRAC CODE:** 3, 11

Brixen $^{\mathbb{N}}$, the powerful ally against disease your sugarbeets need, is the only fully-loaded tetraconazole + azoxystrobin fungicide in the market.

- » Preventative and curative disease control
- » Broad-spectrum control of diseases like Cercospora leaf spot, powdery mildew and Ramularia
- » Long-lasting systemic activity keeps disease at bay
- Dual modes of action work as unique additions to a resistance management program

APPLICATION RATE: 19–21 fl. oz./A

TIMING: First spray of season and consecutive ones as part of a

disease control and resistance management program.

PHI: 14 days
PACKAGING: 2 x 2.5 gal. case



+3800 lb./A
Sucrose increase
over untreated check

#1. Brixen™ 21 oz./A Minerva® Duo 16 oz./A Super Tin® 8oz./A + Koverall® 1.5 lb./A **#2.** Inspire® XT 7 oz./A Super Tin® 8oz./A + Koverall® 1.5 lb./A Minerva® Duo 16 oz./A #3. Untreated check

- * Do not make more than one application of this product before alternating with fungicides with a mode of action other than Qol Group 11.
- 1. 2017-21-Nd North Dakota State University // Sugarbeet Cercospora Leaf Spot Trial // Foxhome, MN



FUNGICIDES



Al: Tetraconazole FRAC CODE: 3

The preferred choice for first foliar fungicide spray, Minerva® provides excellent disease protection against Cercospora leaf spot, powdery mildew and Ramularia.

- » Rapidly and thoroughly distributed throughout the plant, as well as pooled in the crown for extended absorption and long-term control
- » Tank-mix compatible with many products, including post-emergence herbicides
- » Rainfall resistant formulation

APPLICATION RATE: 13 fl. oz./A*

MIN. GAL/ACRE: Ground, 20 gal.; aerial, 5 gal.

TIMING: First spray of season and consecutive ones as part of a

disease and resistance management program.

PHI: 14 days
PACKAGING: 2 x 2.5 gal. case

²Cercospora Leaf Spot Trial





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



AI: Tetraconazole + TPTH FRAC CODE: 3

All of the same benefits of Minerva with the added value of TPTH, providing unmatched control of diseases like Cercospora leaf spot, powdery mildew and Ramularia

- >> Optimum amount of fungicide in one, easy-to-use solution
- » Provides systemic and contact action
- » Excellent resistance management tool

APPLICATION RATE: 16 fl. oz./A*

MIN. GAL/ACRE: Ground, 20 gal.; aerial, 5 gal.

TIMING: First spray of season and consecutive ones as part of a

disease and resistance management program.

PHI: 21 days (14 days for MN, ND, MI)

PACKAGING: 2×2.5 gal. case

³ Cercospora Leaf Spot Trial



+2279 lb./A
Extractable sugar increase

#1. Minerva® Duo Program:

1st Application: Minerva® Duo (16 oz./A);

2nd Application: Super Tin® (8oz./A) +

Marzate® (1.5 b./A);

3rd Application: Headline® (9oz./A)

#2. Inspire® XT Program:

1st Application: Inspire® XT (7 oz/A);

2nd Application: Super Tin® (8oz/A) +

Manzate® (1.5 lb./A);

3rd Application: Headline® (9oz/A)

#3. Proline® Program:

1st Application: Proline® (5.77 oz/A);

2nd Application: Super Tin® (8oz/A) +

Manzate® (1.5 lb./A);

3rd Application: Headline® (9oz/A)

- 2. 2015 Southern Minnesota Beet Sugar Cooperative // Sugarbeet Cercospora Leaf Spot Trial // Raymond, MN
- 3. 2015 Michigan State University // Sugarbeet Cercospora Leaf Spot Trial // Richville, MI
- * Apply Minerva or Minerva Duo as part of a CLS control program in rotation with other fungicides with different modes of action. Follow recommendations of local crop advisor. Minerva Duo is a restricted-use pesticide.



FUNGICIDES



AI: Thiophanate-methyl FRAC CODE: 1

Highly efficient fungicide with broad-spectrum control of diseases like powdery mildew and Cercospora leaf spot.

>> Easy-to-handle formula, mixes easily with many products for optimum disease control

>> Versatile resistance management tool, exceptional tank-mix option

» Protects new growth from disease development

APPLICATION RATE: 10.9–21.8 fl. oz./A* **MIN. GAL/ACRE:** Aerial, 5 gal.; ground, 20 gal.

TIMING: First spray of season and consecutive ones

PHI: 21 days
PACKAGING: 2 x 2.5 gal. case





AI: Copper hydroxide **FRAC CODE:** M

Spinnaker $^{\text{M}}$ provides superior control of diseases like Cercospora leaf spot with lower metallic use rates.

- » **Proven** control of a wide range of bacterial diseases and fungal pathogens
- **>> Outstanding** dry flowable formulation for easy handling, mixing and use along with most insecticides, fungicides and foliar nutrients
- » Valuable part of a comprehensive disease management program
- >> Low risk for resistance

APPLICATION RATE: 0.75–2.0 lb.

MIN. GAL/ACRE: Aerial, 3 gal.; dilute, 20 gal.; concentrate, 3 gal. TIMING: First spray of season and consecutive ones

PHI: 0 days
PACKAGING: 25 lb. bags

Use Instructions 4

- » Begin applications when conditions first favor disease development and repeat at 10- to 14-day intervals if needed.
- » Use the higher rates when conditions favor disease.
- » Add a spreader/sticker.
- » NDSU recommends tank-mixing Spinnaker with other compatible fungicides registered for use on sugarbeets, such as Minerva or Miramar.

- * Miramar Fungicide should be tank-mixed with a protectant fungicide when resistant strains of Cercospora are present in the field. Miramar Fungicide can be tank-mixed with sulfur products for additional disease control and resistance management. For areas east of the Rocky Mountains, do not make more than one application of Miramar Fungicide per season for Cercospora leaf spot.
- Always read and follow label directions and precautions for use. Products referenced herein may not be registered in all states.
 Confirm your state's registration with your Sipcam Agro USA, Inc. representative.



VALUE ADDED SOLUTIONS

Baccarat °

LIQUID ORGANIC MATTER SOIL AMENDMENT

Al: Concentrated mixture of humic substances

A premiere concentrated humic substance featuring dual action technology, Baccarat® mitigates crop stress and supports increased photosynthesis and energy.

- » Increases root system and promotes vegetative growth
- » Improves plant metabolic activity and chlorophyll production
- » Superior formulation with proven performance

APPLICATION: Foliar

RATE: 28–32 fl. oz./A

TIMING: Between 40–68 days after emergence

PACKAGING: 2×2.5 gal. case, 275 gal. tote



Liquid K-Express

READILY AVAILABLE POTASSIUM

Al: Potassium Carbonate

An express EDTA technology mitigates oversaturation, which improves tuber size and yield uniformity and increases sugar content in sugarbeets.

- » Maximizes potassium availability
- » Increases sugarbeet size and development
- » Enhances sugar concentration

APPLICATION: Foliar

RATE: 32–64 fl. oz./A

TIMING: 68–110 days after emergence **PACKAGING:** 2×2.5 gal. case, 260 gal. tote

⁶ Sugarbeet Liquid K-Express Trial





- 2016 Tri-State University Replicated Sugarbeet Trials // Michigan State University | University of Minnesota | North Dakota State 28 oz./Acre Foliar (40-60 D.A.P.) Sugarbeet. Sugar Priced Value: 0.10/lb.
- 2017 University of Minnesota Sugarbeet Potassium Trial // Crookston, Minnesota // Sugar Priced Value: 0.10/lb.
 * Untreated Check
 ** Liquid K-Express (64 fl. oz./A) applied 70 DAP with Minerva Duo



PRODUCTS AT A GLANCE

FUNGICIDES

Arius [™] 250	Azoxystrobin	Liquid	2 × 2.5 gal. case
Brixen [™]	Tetraconazole, Azoxystrobin	Liquid	2 × 2.5 gal. case
Minerva [®]	Tetraconazole	Liquid	2 × 2.5 gal. case
Minerva® Duo	Tetraconazole +TPTH	Liquid	2 × 2.5 gal. case
Miramar™	Thiophanate Methyl	Liquid	2 × 2.5 gal. case
Spinnaker™	Copper Hydroxide	Solid	25 lb. bags

VALUE ADDED SOLUTIONS

Baccarat [®]	Concentrated humic substances	Liquid	2 × 2.5 gal. case, 260 gal. tote
Liquid K-Express®	Potassium + chelates	Liquid	2 × 2.5 gal. case, 260 gal. tote







gldWla 'Wla ' %, ++!, -,!-)%(©Sipcam Agro USA, Inc. Baccarat, Minerva and Miramar are registered trademarks and Arius, Brixen and Liquid K-Express are trademarks of Sipcam Agro USA, Inc. Minerva Duo is a restricted-use pesticide. Always read and follow label directions and precautions for use. Products referenced herein may not be registered in all states. Confirm your state's registration with your Sipcam Agro USA, Inc. representative. Super Tin and Manzate are registered products of UPL. Headline is a registered product of BASF. Inspire XT is a registered product of Syngenta. Proline is a registered product of Syngenta. Koverall® is a registered product of FMC