### American Crystal Sugar Company

# AgNotes



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#### www.crystalsugar.com







#### https://www.crystalsugar.c om/agronomy/ag-goldstandards/

- Fertility
- Variety Selection
- Stand Establishment
- Weed Control
- Disease & Insect Control
- Harvest



## Planting Time Treatments Optimize Control & Production

There are Best Management Practices (BMP's) that need to be done up front at planting or very early in the growing season to give your sugarbeet crop the best chance at success in stand establishment and control against weeds, insects, and diseases. Which practices to deploy depend on field history and challenges in your growing area.

Below are some early, planting time practices to consider along with additional resources (follow the blue links). And as always, contact your Agriculturist for more information.

#### Variety placement

- Review variety disease tolerance ratings for your purchased seed and place accordingly based on field history.
  - Variety Selector with disease tolerance sorts

#### Early weed control for kochia and waterhemp

- <u>A preplant incorporated (PPI) or preemerge (PRE) herbicide</u> is a requirement for successful waterhemp and kochia control. The herbicide and rate recommended is dependent on the targeted weed species.
- Seedbed preparation tillage can be used to control emerged weeds prior to planting. Be aware vertical tillage can leave escapes as it does not lift and cut weeds as horizontal (shovel type) tillage can.
- Burndown application of Gramoxone to control weeds missed by tillage or newly emerged weeds prior to sugarbeet emergence. This is extremely effective for kochia control as it is the earliest emerging weed species. Take caution and scout as any emerged sugarbeet will be killed.

#### Insects

- Many sugarbeet insects require an at-plant insecticide since they remain in the soil and post applications, above ground, are generally ineffective. Two insects with specific control considerations are Sugarbeet Root Maggot and Springtail.
- <u>Sugarbeet root maggot (SBRM) control</u> requires both at-plant and post insecticide applications to be most effective.
  - **Counter** at-plant is the standard recommended treatment in moderate and severe SBRM pressure areas.
    - Moderate pressure areas need Counter @ 7.5 lbs./acre.
    - Severe pressure areas need Counter @ 8.9 lbs./acre.
  - Insecticide seed treatments (Poncho Beta, Cruiser Maxx, Nipsit), Midac FC, and Mustang Maxx in-furrow are not stand alone at-plant insecticide treatments in moderate or severe SBRM areas.
    - They must be used in combination with an additional at-plant insecticide.



- Springtail pressure
  - Counter at-plant is the standard recommendation @ 4.5 7.5 lbs./acre for springtail control.
  - Insecticide seed treatments (Poncho Beta, Cruiser Maxx, Nipsit), Midac FC, and Mustang Maxx in-furrow are not stand alone at-plant insecticide treatments for springtail.
    - They must be used in combination with an additional at-plant insecticide to provide sufficient efficacy.

#### Rhizoctonia Management

- Fungicide recommendations for Rhizoctonia Control
- Be aware of the variety's tolerance to Rhizoctonia.
- All seed comes with Rhizoctonia fungicide seed treatment, but some scenarios may require an addition of an at-plant fungicide application.
  - Knowing field history and previous crop is essential in making the best management decisions.
    - Fields with possible heightened Rhizoctonia pressure requiring atplant Rhizoctonia fungicide application:
      - Previous crop year was soybean or edible beans
      - Fields that do not have small grains in the rotation
      - Fields with a short rotation

#### Stand Establishment

- Strong stand establishment is the foundation for optimizing crop potential to have an at-harvest stand of 170 240 beets per 100 feet of row.
- The following link leads to resources on planter maintenance & settings, and various fact sheets.
  - Stand Establishment resources

#### **Cover Crop**

- A cover crop is vitally important to protect seedling sugarbeets from adverse wind events and soil movement. A spring seeded cover crop can help reduce damage and protect the sugar beet stand.
- See previous Ag Note on Cover Crops for more information.

ACSC 5 Year Summary on Cover Crop 2019 - 2023			
Cover Crop	Rec Sugar/Acre	\$/Acre*	
No	9,467	\$1,920	
Yes	9,804	\$1,993	
*Gross payment Calculated from 5 year average payment variables			

\*Gross payment Calculated from 5-year average payment variables

#### Fertility

- Fertility management is a primary focus to optimizing both quality and tons for efficient sugarbeet production.
  - Link to Fertilizer resources
- University recommended sugarbeet fertility recommendations
  - o U of M sugarbeet fertility recommendations
  - o NDSU sugarbeet fertility recommendations

#### Starter Fertilizer

 <u>Starter fertilizer</u> is the precision placement of phosphorus allowing easy access to the seedling root. This can reduce the amount of broadcast P fertilizer required while promoting early season growth and development.

ACSC 5 Year Summary of Starter Fertilizer 2019 - 2023		
Starter	Rec Sugar/Acre	\$/Acre*
No	9,467	\$1,920
Yes	9,632	\$1,960
*Gross payment Calculated from 5-year average payment variables		



For prompt answers to your questions and comments, call and leave a message and Tom Astrup or one of his staff will respond as soon as possible.

Shareholders: 1-800-633-8941