



Application # Sequence based on Initial Fungicide Application Timing & 12-Day Intervals	Recommended Tank-Mix and Rotation Order of Fungicide Modes of Action Initial Fungicide Timing At or Just Prior to Row Closure			LATE JULY Initial Application (Replants)	
	LATE JUNE	EARLY JULY	MID JULY	OPTION 1	OPTION 2
1	Triazole + EBDC	Triazole + EBDC	Triazole + EBDC	Triazole + EBDC	TPTH + Benzimidazole
2	EBDC	TPTH + Benzimidazole	TPTH + Benzimidazole	TPTH + Benzimidazole	Triazole + EBDC
3	TPTH + Benzimidazole	Triazole + EBDC	Triazole + EBDC	Headline/Priaxor + Triazole	Headline/Priaxor + TPTH
4	Triazole + EBDC	EBDC	Headline/Priaxor + TPTH		
5	EBDC	Headline/Priaxor + TPTH			
6	Headline/Priaxor + TPTH				

**ACSC Cercospora Recommendations are formulated based on both:**

**Cercospora Leaf Spot (CLS) control and resistance management of fungicides and varietal tolerances:**

To achieve Cercospora control, maintain fungicide efficacy, and preserve varietal tolerances, proper fungicide tank mixes and application intervals are required. Normal fungicide application intervals (12 days) limit the propagation of Cercospora isolates that are resistant to generic tolerances such as CR+.

- **Fungicides are protectants**; they are not curatives
- **Initial fungicide application timing is critical**, prior to or at row closure, to prevent Cercospora establishment in fields. It is better to apply early than too late.
  - Initial fungicide applications and application intervals should have **same timing for both CR+ and non-CR+ varieties.**
- **Tank-mix and rotate different fungicide chemistry classes** (modes of action / MOA)
  - This conditions the cercospora population to be susceptible to subsequent applications of different MOAs
  - ACSC tank-mix recommendations are a combination of both systemic/translaminar + contact fungicides
- **12-day spray intervals in-between applications. Except 7-day interval when EBDCs are applied alone.**
- CR+ varieties are an effective tool if cercospora pressure is kept low. It is not recommended to extend intervals.

**Additional Applications @  
 End of Season Fungicide  
 Recommendations:**

Headline/Priaxor with tank mix partner to be applied last week of August to 1st week of September to optimize plant health and frost tolerance benefits.

- Fungicide application may still be needed after Headline/Priaxor application, depending on pressure and weather conditions.
- Discuss with Agriculturist options w/ PHIs for Prepile and Stockpile.

**Contact Your Agriculturist**

**Contact your American Crystal Agriculturist for the most up-to-date information and issues affecting sugarbeets in your area.**

# Fungicide Application Tips & Detail

CLS Variety Rating	Water Volume	Spray Intervals	Glyphosate Tank Mixes
CLS control should improve with a better CLS variety rating. However, this may not equate to fewer fungicide applications.	CLS fungicides need excellent coverage to protect the sugarbeet leaf surface. To achieve this requires <b>15 to 20 gallons</b> of water per acre. Using nozzles that will produce Medium droplet sizes of 250–350µm (microns) is optimum for fungicide applications. Utilize nozzle manufacturer's recommended application pressure for maximum leaf coverage.	Start early and stay on track once CLS is found in your area. The time interval between applications <u>should not exceed 12 days</u> , plan best as possible around adverse weather conditions (rain, wind, hail). <u>For EBDC's alone follow a 7-8-day spray interval.</u>	Are not recommend with CLS fungicide applications since optimum water volume requirements are different for glyphosate and CLS fungicide applications as the target pests are not the same.

## Triazoles:

- Do not use in more than 50% of applications per cropping season and only in a tank-mix.
- Triazoles are vital to CLS management and overuse may further increase resistance.
- Alternate different Triazoles if used more than once in a spray season.
- Due to a high probability of cross-resistant CLS spores, only one product from the below groups should be used in a season:
  - Do not use both Inspire XT/Esquire XT & Provysol in the same growing season.
  - Do not use both Proline/Phobos FC & Minerva/Domark in the same growing season.
- Watch Preharvest intervals (PHIs) for Triazoles. They can range from 7 to 14 to 21 days.
  - Consider applying Triazoles with longer PHIs early in the spray season.

## EBDCs (Mancozeb/Manzate):

- Are an effective tank mix partner for CLS control and resistance management.
- There is no known resistance to EBDCs.
- Pre-slurrying product helps in tank-mixing.
- Manebs are not as effective on CLS as Mancozeb.

## Tins (TPTH):

- Use in only **2 applications** per cropping season and only in a tank-mix.
- Tins are vital to CLS management and overuse may further increase resistance.

## Topsin (Benzimidazole):

- Use only **once** per season early in spray program and only in a tank-mix (e.g., Tins—TPTH).

## Headline/Priaxor/Veltyma (Strobilurin):

- Headline/Priaxor benefits include: plant health; harvest frost deterrence/recovery; and storage benefits.
- Use with a tank mix of Tin (TPTH) or Triazole at a full rate.

## Copper:

- Coppers have a 0-day Pre-Harvest Interval (PHI), option if up against Pre-Harvest Intervals during pre-pile or before stockpile harvest as a tank-mix partner.
- Ideally, tank-mix copper with a non-contact fungicide (Triazole) to avoid two contact fungicides in the same application. Must adhere to the PHI of tank mix partner.
- Talk to your Agriculturist if you are planning to use a Copper product.

Fungicide Use Information				
Fungicide	Fungicide Class	Rate /Acre	REI (Reentry Interval) Hours	PHI - (Pre- Harvest Interval) Days
Inspire XT/ Esquire XT	Triazole (Difenoconazole + Propiconazole)	7 oz.	12	21
Proline	Triazole (Prothioconazole)	5.7 oz.	12	7
Phobos FC	Triazole (Prothioconazole)	7.6 oz.	12	7
Provysol	Triazole (Mefentrifolconazole)	4 oz.	12	7
Minerva /Eminent VP	Triazole (Tetraconazole)	13 oz.	12	14
Domark	Triazole (Tetraconazole)	6.9 oz.	12	14
Minerva Duo	Triazole + TPTH (Tetraconazole + Triphenyltin Hydroxide)	16 oz.	48	21
Lucento	Triazole + SDHI (Flutriafol + Bixafen)	5.5 oz.	12	21
Veltyma	Triazole + Strobilurin (Pyraclostrobin + Mefentrifolconazole)	8 oz.	12	7
EBDC (Several Available)	EBDC (Mancozeb)	Ranges by Product	24	14
Agri Tin Flowable / Super Tin 4L	TPTH (liquid)	8 oz.	48	7 MN / 7 ND
Topsin 4.5FL / T-Methyl 4.5F	Benzimidazole (liquid)	10 oz.	24	21
Topsin M 70WP / T-Methyl 70WSB	Benzimidazole (dry)	0.5 lbs.	24	21
Headline SC	Strobilurin	9 oz.	12	7
Priaxor	Strobilurin + Xemium	6.7 oz.	12	7
Copper (Several Available)	Copper	Ranges by Product	48	0

This table is not a substitute for the product label. Always refer to the label for product details.

