2022 ACSC Cercospora Leaf Spot Fungicide Program

Application # Sequence based on Initial Fungicide Application Timing & 12-Day Intervals	Late June Initial Application	Early - Mid July Initial Application	Mid - Late July Initial Application	Late July Initial Application	
				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	Triazole + Headline/Priaxor	Headline/Priaxor + TPTH
4	Triazole + EBDC	EBDC	Headline/Priaxor + TPTH		
5	EBDC	Headline/Priaxor + TPTH			
6	Headline/Priaxor + TPTH				

CR+ Variety CLS Fungicide Program

	Late June Initial Application	Early - Mid July Initial Application	Mid - Late July Initial Application	Late July Initial Application
1	Triazole + EBDC	Triazole + EBDC	Triazole + EBDC	Triazole + EBDC
2	TPTH + Benzimidazole	TPTH + Benzimidazole	TPTH + Benzimidazole	**Extended Interval**
3	**Extended Interval**	**Extended Interval**	**Extended Interval**	Headline/Priaxor + TPTH
4	Triazole + EBDC	Triazole + EBDC or EBDC	Triazole + Headline/Priaxor	
5	**Extended Interval**	Headline/Priaxor + TPTH		
6	Headline/Priaxor + TPTH			

American Crystal Sugar Company

Contact your Agriculturist

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

ACSC Cercospora Recommendations are formulated based on both:
Cercospora leaf spot (CLS) control and fungicide resistance management

- Tank-mix and rotate different fungicide chemistries
- Tank-mix recs combine systemic/translaminar + contact fungicides
- 12-day spray intervals
- Fungicides are protectants, they are not curatives.
- Initial fungicide application timing is critical – better to apply fungicide too early than too late
- Last App – Designed to be applied last week of August to 1st week of September
  - Fungicide application may still be needed in September
  - Discuss with Agriculturist options w/PHI's for Prepile & Stockpile

CR+ Varieties

- Extended Intervals are NOT Skips
- Continue to monitor Daily Infection Values & CLS
- CR+ does Not have immunity to Cercospora leaf spot, they only have a higher tolerance.
- CR+ varieties require fungicide applications to optimize control, Recoverable Sugar/Acre & Revenue/Acre
- The 1st two applications are most important to achieve maximum potential

AG GOLD STANDARDS

Fungicide Application Tips & Detail

CLS variety rating – CLS control should improve with a better CLS variety rating. However, this may not equate to fewer fungicide applications.

Water volume – CLS fungicides need excellent coverage to protect the sugarbeet leaf surface. To achieve this requires **15 to 20 gallons** 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.

Spray intervals – Start early and stay on track once CLS is found in your area. The time interval between applications should not exceed 12 days, plan best as possible around adverse weather conditions (rain, wind, hail). For EBDC's alone follow a 7-8-day spray interval.

Glyphosate tank mixes – 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
    - If applying just 2 Triazoles per season:
        - Do not use both Provysol & Inspire XT in the same growing season.
- Watch Preharvest intervals (PHI's) for Triazoles, they can range from 7 to 14 to 21 days.
    - Consider applying Triazoles with longer PHI's early in the spray season
    - Use shorter PHI's later in your fungicide program for harvest planning.

EBDC's (Mancozeb/Manzate):

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

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.
- Watch Pre-Harvest intervals (PHI's) as they range from 7 - 21 days.

Topsin (Benzimidazole):

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

Fungicide Use Information

Fungicide Class	Fungicide	Rate/Acre	REI (Reentry Interval) Hours	PHI - (Pre-Harvest Interval) Days
Triazole	Provysol	4.0 oz.	12	7
Triazole	Inspire XT	7.0 oz.	12	21
Triazole	Proline	5.7 oz.	12	7
Triazole	Minerva / Eminent VP	13 oz.	12	14
Triazole + TPTH	Minerva Duo	16 oz.	48	14
Triazole + SDHI	Lucento	5.5 oz.	12	21
Triazole + Strobilurin	Veltyma	8.0 oz.	12	7
EBDC	Several	Ranges by Product	24	14
TPTH (liquid)	Agri Tin Flowable / Super Tin 4L	8.0 oz.	48	7
TPTH (dry)	Agri Tin / Super Tin 80WP	5.0 oz.	48	7 MN / 21 ND
Benzimidazole (liquid)	Topsin 4.5FL / T-Methyl 4.5F	10.0 oz.	24	21
Benzimidazole (dry)	Topsin M 70W / T-Methyl 70WSB	0.5 lbs.	24	21
Strobilurin	Headline SC	9.0 oz.	12	7
Strobilurin + Xemium	Priaxor	6.7 oz.	12	7
Copper	Several	Ranges by Product	48	0

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

Headline/Priaxor (Strobilurin):

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