

2020 CLS Quicksheet

SMBSC CLS Fungicide Principles

- Start with an EBDC alone (application zero) when the leaves between rows are 3 inches apart.
- Always use two effective modes of action in every application after application zero.
- Alternate chemistries and alternate triazole products used during the season.
- Use a spray volume of 20 to 25 gpa (5 to 7 gpa for aerial applications).
- Make fungicide applications on a 10 to 12 day interval, unless environmental conditions dictate otherwise.
 - CLS DIV's will begin posting in June when CLS may become active: https://www.smbc.com/Agronomy/CLS_DIVvalues.aspx
- Utilize nozzle selection, pressure, and adjuvants to achieve optimal coverage.
 - Optimal droplet size for coverage will depend on wind conditions.
- Strobilurins, benzimidazoles (Topsin), and SDHI products are not considered effective tank mix partners.
- Do not tank mix fungicides and glyphosate.
- Consult labels before tank-mixing fungicides with other crop protection products.
- Always follow the label for application instructions and restrictions.

Variety Ratings

Variety	Rating
Crystal M821	3.8
SES-V 862	3.8
SES-V 863	3.8
SES-V 881	3.8
Crystal M837	3.9
Hilleshog 2219	4.0
Beta 9780	4.1
Beta 9810	4.1
Crystal M509	4.1
Hilleshog 9739	4.1
Beta 9475	4.2
SES-V 883	4.2
Crystal M623	4.4
Crystal M579	4.5
Crystal 018	4.7

* Lower ratings are more tolerant, higher ratings are more susceptible.

Example Program

0. EBDC Alone
1. Tin + EBDC
2. Triazole + EBDC
3. Tin + Copper
4. Triazole + EBDC
5. Tin + EBDC
6. Triazole + Copper

*Small plot research and field observations show that application zero provides significantly better control than fungicide spray programs that started later.

CLS Fungicide Product Options

Triazole/DMI Products	Rate/Acre	REI	PHI
Eminent VP or Minerva	13oz	12hrs	14 days
Provysol	5oz	12hrs	7 days
Inspire XT	7oz	12hrs	21 days
Proline 480 SC	5.7oz	12hrs	7 days
Enable 2F	8oz	12hrs	14 days
Topguard	14oz	12hrs	21 days

*These fungicide products have restrictions on the amount of product available for use during a season. However, it is the recommendation of SMBSC that each product is only used once during the season regardless of what is allowed via the label. Do not use both Inspire XT and Provysol in the same season as these products have a high level of cross resistance.

CLS Fungicide Product Options Cont.

Tin Products	Rate/Acre	REI	PHI	Copper Products	Rate/Acre	REI	PHI
Super Tin 4L	8 oz	48hrs	7 days	Badge SC	2 pts	48hrs	0 day
				Badge X2	2 lbs	48hrs	0 day
Super Tin 80WP	5 oz	48hrs	7 days	ChamplON	1.25 lbs	48hrs	0 day
				Champ 2 Flowable	2 pts	48hrs	0 day
Agri Tin	5 oz	48hrs	7 days	Cuprofix Ultra	2 lbs	48hrs	0 day
Agri Tin Flowable	8 oz	48hrs	7 days	Kocide 3000	1.25 lbs	48hrs	0 day
*Do not exceed 15 oz/A of Super Tin/Agri Tin 80 WP or 24 oz/A of Super Tin/Agri Tin 4L per season.				*There may be other copper products available for use in sugar beets. Follow label instructions.			
				*Do not apply glyphosate within 7 to 10 days of a copper product as this may cause phytotoxicity.			

EBDC Products	Rate/Acre	REI	PHI	Premixed Products	Rate	REI	PHI
Manzate Max	1.6 qts	24hrs	14 days	Veltyma (Provysol+Headline)	10 oz	12hrs	7 days
Manzate Pro-Stick	2 lbs	24hrs	14 days	Propulse (Proline+SDHI)	13.6 oz	12hrs	7 days
Dithane M45	2 lbs	24hrs	14 days	Brixen (Minerva+Azoxytrobilin)	21 oz	12hrs	14 days
Dithane F-45	1.6 qts	24hrs	14 days	Acropolis (Minerva+T-Methyl)	32 oz	24hrs	21 days
Koverall	2 lbs	24hrs	14 days	Lucento (Topguard+SDHI)	5.5 oz	12hrs	21 days
Penncozeb 80WP	2 lbs	24hrs	14 days	Minerva Duo (Minerva+Tin)	16 oz	48hrs	14 days
Penncozeb 75DF	2 lbs	24hrs	14 days				
*There may be other EBDC products available for use in sugar beets. Follow label instructions.				*Be aware of premixed fungicide products as they may not contain two effective modes of action (<u>most do not</u>). If one of these products is used it should be tank mixed with either an EBDC or copper product.			

The information contained in this quicksheet is meant to provide options for a CLS fungicide program for your operation in 2020. However, it can not provide all the details for every application. **Consult your agriculturalist and the product label.**



Updated July 24th, 2020

Agricultural Department
Southern Minnesota Beet Sugar
Cooperative