Technical Bulletin

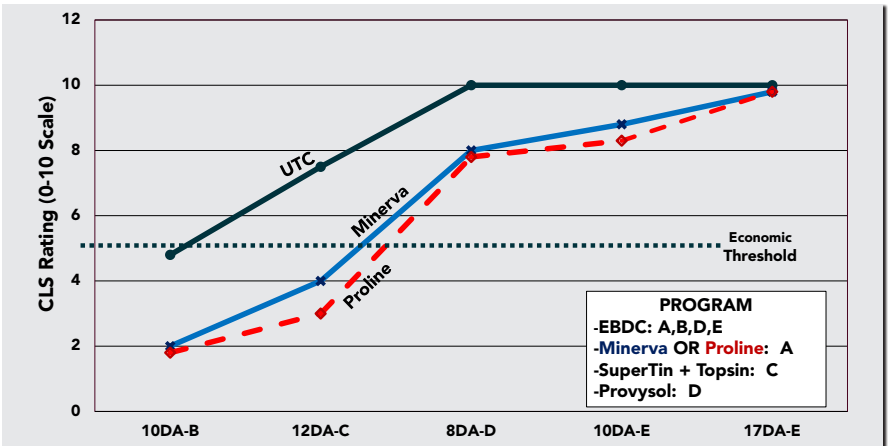
Minerva® Fungicide

Minerva® versus Proline®

Triazoles are a crucial component in cercospora leaf spot (CLS) management programs in sugar beets. In 2025, Belchim USA, supplier of Minerva Fungicide, coordinated with 10 different industry organizations (Universities, processors, and private companies) in Michigan, Minnesota and North Dakota to implement research trials comparing Minerva versus Proline when used as the first triazole for CLS control.

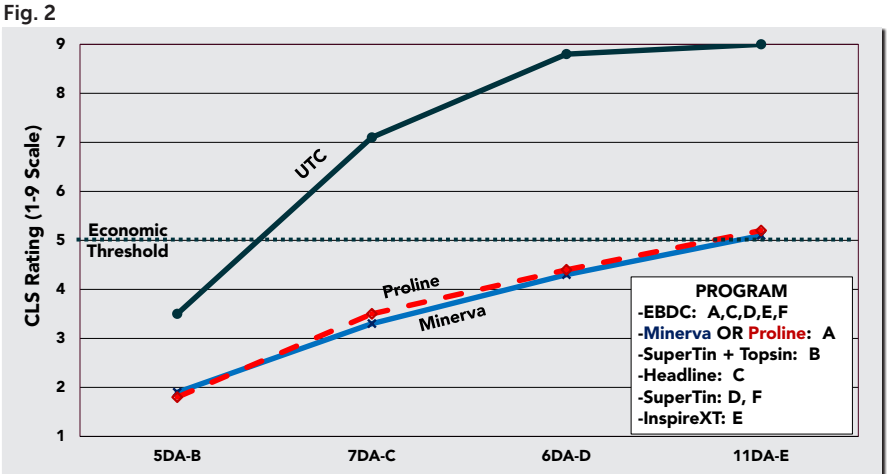
In 9 of the 10 trials, there was no statistical difference in CLS control when Minerva was applied as the first triazole by comparison to Proline.

Fig. 1



Inoculated 7 days before 1st application
5 applications on 2-week schedule
EBDC was Manzate Max 1.5qt (BCP25-615)

Fig. 2



6 applications: A: 7/14, B: 7/26, C: 8/4, D: 8/14, E: 8/29, F: 9/4
EBDC was Manzate ProStick 2lbs
(BCP25-607)

The graphs on the left are indicative of results from all of the trials conducted in 2025. Figure One shows results from a trial conducted by KayJay Ag Services in Kent, Minnesota. CLS ratings were noted at different times during the growing season following the different program application timing and product options. Figure Two shows comparable control of CLS from a trial conducted by Southern Minnesota Beet Sugar Company, regardless of the first triazole applied being Minerva or Proline.

Based on the results of all the trials, Minerva is an equally effective *AND* cost efficient choice for the first triazole to use!

MINERVA APPLICATION PARAMETERS:

- Use rate of 13.0 oz/A
- Maximum 2 applications per season
- Recommend to use with nonionic surfactant
- Rainfast within 1 hour
- Apply preventatively or at first sign of disease
- Ground or aerial application approved
- Formulation – microemulsion
- Residual control of >14 days
- Highly systemic and translaminar movement
- Tank-mix with an EBDC or copper
- Restricted-entry interval – 12 hours
- Pre-harvest interval – 14 days

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