



*Ballad Plus is **Not** a Replacement for EBDCs*

Ballad Plus is a biological fungicide with a strain of *Bacillus pumilus* as the pathogen parasitizing the target pathogen. Ballad has recently been promoted as an alternative to using an EBDC with other fungicide products for resistance management. The label for Ballad Plus gives claim for control of Cercospora leaf spot. Ballad Plus has not been researched extensively for control of Cercospora leaf spot. In our survey of researchers, Mohamed Khan at NDSU is the only researcher that has taken a look at Ballad Plus. The results were not good. SMBSC and others are currently researching Ballad Plus for control of Cercospora leaf spot and will have a report for you after this production season. Therefore, with the information we currently have, SMBSC would not recommend Ballad Plus as an alternative to using an EBDC product for resistance management. Due to the lack of valid research with Ballad Plus, any claims that Ballad Plus would aid in control of Cercospora leaf spot is a frivolous claim.

For a product to aid in control or manage resistance, the product needs to have some level of effectiveness. With the current information we have, Ballad Plus does not possess this trait.

EBDC products admittedly are not the friendliest products to work with. However, the fact of the matter, when managed correctly the EBDC's provide adequate control of Cercospora leaf spot and thus are a good partner with other fungicides to manage Cercospora leaf spot resistance to fungicides.

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