

The TGA Insight



The Fungicide Conundrum: Is It Worth The Investment When It's Hot And Dry

- Danielle Chamberland

Sometimes the answer is no. That may not have been the answer you were expecting from a retail agronomist. But under certain conditions, it's simply not worth making another pass. However, this year, do I think it's worth leaving the lake to apply a fungicide? My answer is: it depends.

Deciding whether to pull the trigger on a fungicide application can be difficult. Rain clouds have been extremely sporadic, and fields half a mile down the road have received significantly different amounts of moisture. Ultimately, the decision whether to spray a fungicide always comes back to the disease triangle – a susceptible host, the presence of the pathogen, and a favorable environment. Assessing whether the environmental conditions are right for fungus development depends on a few things.

First, it's important to have a look at plant population and canopy closure. Fields with a dense crop canopy hold large amounts of humidity under the canopy even during extended periods without rain. For cereal crops, foliar fungicides are usually applied to protect from leaf spot diseases such as tan spot and Septoria. Because these diseases are trash-borne, they tend to migrate from the bottom to the top. If you take a walk through the field during midday and come out with wet feet, an application is likely warranted. On the flip side, if you are in an area where the crop is headed out and the rows still haven't completely closed, disease incidence won't be high enough to justify an application.

Regarding fungicide on canola acres, I see far less consistency for ROI compared to cereals and pulses. However, it's still important to consider the microclimate within the crop, especially when there's a lush, dense canopy. The pathogen in the soil that poses a threat for the presence of sclerotinia is a sclerotia body. They're melanized, with a hard, rind-like coating that requires moisture to germinate. So even though we've had below-average precipitation, those sclerotia can still be present in the fields. With the moisture we received over the long weekend, there is potential to see a flush of germination happening.

In summary, the best approach to determining if a fungicide application will be worth the investment is to walk your fields and assess the crop canopy. If you are still skeptical about fungicide applications during a year when environmental conditions are less than ideal, check back in with us in the fall. We are conducting many in-crop fungicide side-by-side trials and would love to discuss our findings with you.

