

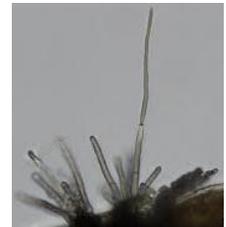
# AGRICULTURAL BEET

July 18th, 2019  
Cercospora Leafspot Update

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## A Midsummer Check-Up: Reminders, Specs, and Recs.

Congratulations on a job well done! The fact that your fields are relatively free of CLS infections thus far is a bright spot in a challenging year and should provide far greater opportunity for our crop to catch up than if we were dealing with an early onset of leaf disease. Stay the course! The 10-day forecast looks as favorable as any 10 days we've had so far this year. The prospect of mild sunny days with modest night time temps will be welcome relief to a sugarbeet crop that doesn't particularly like as much heat as its warm weather neighbor; corn. But, do not allow yourself to be lulled to sleep by the forecast. CLS spot development requires time for infection and incubation. Therefore, we will not be able to fully measure the extent of infection that has occurred over this hot and muggy spell for about another week. Further, by the time those infections appear as spots, the cycle of reinfection and sporulation has already started all over again but this time with an even greater level of inoculum. Therefore, it is crucial that we adhere to spray intervals now to have our fungicide active ingredients in place as these spores germinate and grow (see attached picture). In other words, try to make spray decisions based on recent weather rather than a forecast.



**Let's recap a few highlights of previous AgBeets as we round the first bend of the summer CLS season.**

1. We are aware that shareholders are incorporating new concepts into their CLS program in 2019. If you are trying some new ideas, remember to prioritize these inputs so as not to integrate too many new additions in one year and risk being unable to discern which provided a benefit versus those that did not.
2. In addition to these newer ideas, maintain a focus on tried and true BMPs such as but not limited to...
  - a. Achieving 20 gpa water volume or more through nozzle, speed, or pressure selection.
  - b. Be mindful of, and try to minimize exceeding nozzle boom height recommendations.
  - c. Resistance management guidelines such as tank-mixing and alternating active ingredients.
3. Wind tunnel data suggests that deposition adjuvants can maximize the volume of spray droplets that are aptly sized to increase leaf interception and they can also assist with smoothing out variability that result from nozzle and pressure selection. Base your adjuvant selections on sound data and experience.
4. Regular (and thorough) sprayer cleaning. Use of deposition aids and sticker additives make this even more important. These adjuvants possess qualities designed to assist with droplet deposition and adhesion to sugarbeet leaves. These qualities however, also result in adherence to the inside of spray equipment as well, making them capable of plugging nozzles or screens or worse – binding with future herbicide products and inadvertently releasing them into future spray mixes that could harm a crop. Always consult product label for proper handling, mixing order, tank cleanout procedures, and PPE.
5. Preliminary wind tunnel data also suggest that there is no practical reason to run at pressures in excess of nozzle specifications.
  - a. Flat fan nozzles appear to provide greater forgiveness to the impact of various additives and varying pressure ranges but they do not recommend running at spray pressures above 60 psi.
  - b. If your preference calls for higher pressure, consider a nozzle selection that allows for it.