

Diagnostic guide for *Alternaria* leaf spot on sugar beet, red beet, and chard

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ABSTRACT

Alternaria leaf spot, caused by *Alternaria* spp., is a common foliar disease of sugar beet and other *Beta vulgaris* crop types. Known to be present in the United States since at least the 1950s, this disease has been found in all major sugar beet growing regions of the United States as well being reported as present everywhere beets are grown. *Alternaria* leaf spot symptoms are similar to several other common foliar diseases of beets including *Cercospora* leaf spot and the early stages of *Phoma* leaf spot. Symptoms and signs of this disease in the field do not provide enough information to help distinguish between diseases unless the viewer is readily familiar with the pathogen, especially when viewed with the unaided eye. *Alternaria* cultures can be identified to species using colony and conidial morphology on select culture media or using molecular markers. While not as common as *Cercospora* leaf spot, *Alternaria* leaf spot can result in significant reductions in yield and quality when not managed.

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