

## **Investigations of Cercospora leaf spot Biology in Sugar Beet**

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The relative fitness of benzimidazole and strobilurin insensitive *Cercospora beticola* isolates were compared to a fungicide sensitive isolate on sugar beet in the greenhouse at the University of Wyoming. Disease development was determined on both a Cercospora leaf spot resistant and susceptible variety. The sensitive and insensitive isolates were recovered from sugar beet fields from the Western Sugar production region. After inoculation, parameters of lesion development, expansion and sporulation were measured up to 24 days post inoculation. Lesion numbers and expansion for those isolates were in general greater in the susceptible variety compared to the resistant. Lesion expansion showed differences in the isolates in how they responded to the cultivars. Disease severity (0-100) showed slight differences between isolates. Sporulation measurements were variable for the susceptible cultivar and consistent at zero for the resistant cultivar across all three isolates. This study is ongoing and currently in its second round at the university's greenhouse.