

Physoderma Brown Spot Shows Up In Illinois Corn Fields

URBANA, ILL.

Physoderma brown spot is making an appearance in some Illinois corn fields, said Carl Bradley, University of Illinois Extension plant pathologist.

Severe symptoms of this disease, caused by the pathogen *Physoderma maydis*, have been observed in parts of southern Illinois, Bradley said. Symptoms appear as small, round to oblong spots on the leaves which generally occur in bands.

"This disease can be confused with purple leaf sheath, because symptoms also can occur on the leaf sheath as dark purple circular lesions," Bradley said. "However, if no lesions on the leaves are present, then the leaf sheath symptoms likely are caused by purple leaf sheath."

Purple leaf sheath occurs when pollen grains are trapped between the leaf sheath and stalk and are colonized by saprophytic fungi, which is cosmetic only and does not cause damage, he said. On the other hand, infections by *P. maydis* generally take place in the leaf whorl or in places where free moisture is present.

"A quick scan of fungicide labels revealed that a few fungicide list *Physoderma* brown spot as a target disease," Bradley said. "Although the disease symptoms may be somewhat severe in some fields, an application of a foliar fungicide at this stage may not be beneficial."

Bradley said most affected corn fields are now at a stage where the leaf whorl is no longer present,

reducing the likelihood of new infections. In fields with severe symptoms, the best management practices are to rotate to a non-host crop the following year and plant the most resistant hybrid available the next time corn is grown in those fields.

To confirm if you have *Physoderma* brown spot in your field, send samples to the U of I Plant Clinic. More information is available at web.extension.illinois.edu/plantclinic. Δ



(Right) Physoderma brown spot lesions on corn leaf.

(Below) Dark circular lesions of Physoderma on a corn leaf.

