Identification of Mycosphaerella (Ascochyta) blight of field peas

Causal pathogens: Mycosphaerella pinodes (= Ascochyta pinodes), Ascochyta pisi, and Phoma medicaginis var. pinodella

Michael Wunsch, Plant Pathologist North Dakota State University Carrington Research Extension Center

IDENTIFICATION OF MYCOSPHAERELLA BLIGHT:



- The disease progresses from the bottom of the plant to the top, and it is often most severe at the bottom of the canopy.
- Leaf lesions begin as either purplish-black or brown specks (A,D) or large brown lesions with a distinct concentric ring pattern (B,E,F,G). As the disease progresses, these lesions coalesce, and the lower leaves may become completely diseased.
- Pod lesions typically appear as purplish-black or brown specks (D).
- Stem lesions are purplish-black (C) and may extend below the soil-line. Stem lesions weaken the stem and contribute to lodging. When severe, they girdle the plant, causing premature senescence of plants.

MYCOSPHAERELLA BLIGHT IS EASILY CONFUSED WITH BACTERIAL BLIGHT - Fungicides have no efficacy against bacterial blight.

- Like Mycosphaerella blight, bacterial blight lesions occur on all plant parts, including the leaves (A,C,D,E), stems (E), petioles (E), and pods (B).
- Bacterial blight lesions are often brown and shiny (E); on leaves, they can be translucent (C, left side of leaf).
 They often appear watersoaked and greasy (B,E).

