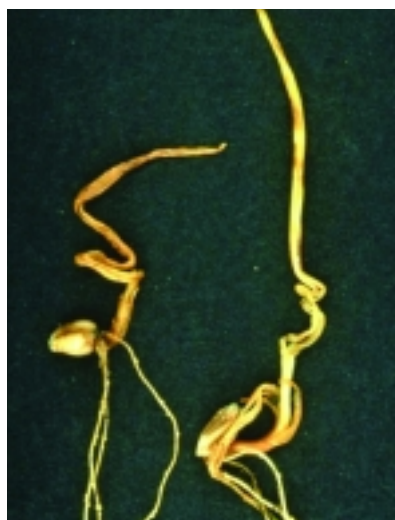


Microdochium seedling blight



Microdochium nivale

Microdochium seedling blight can cause very serious seedling losses and poor crop establishment, particularly when soil conditions are poor.

IDENTIFICATION

The most common symptom of serious attacks of *Microdochium nivale*, both pre- and post-emergence, is very poor plant establishment.

Typically, *Microdochium nivale* infects the ear but does not produce symptoms on the developing grain. A crop with no visible symptoms of ear blight may still have high levels of infection.

The fungus can cause root rotting, brown foot rot, leaf blotch (usually following some other form of damage) and, in combination with *Fusarium* species, ear blight. *Microdochium* can contribute to foot rots which usually affect plants under stress, especially lack of moisture.

LIFE CYCLE

The main source of *Microdochium nivale* is contaminated seed. Although found in most soils, the soil-borne phase of the fungus is of little consequence.

Spores resulting from seedling blight or stem-base browning are splashed up the plant, ultimately infecting the ear.



Microdochium-infected seed – poor establishment of untreated seed (left)

ECONOMIC IMPORTANCE

Microdochium nivale is the most important cause of seedling blight. High levels of seed infection can cause very poor crop establishment and significant yield losses, especially if seedbed conditions are poor.

Seed treatment can effectively control the disease and ensure good establishment.

RISK FACTORS

- wet weather during flowering
- high level of seed infection
- untreated seeds sown into poor seedbeds
- late-sown crops.

CONTROL

Seed treatments are very effective at controlling *Microdochium* seedling blight. Most seed treatments provide good protection.

Thresholds for seed treatment

10% or more seed infection.

Molecular test – gives yes or no result.