



Agronomy Factsheet:

WHITE MOULD

White mould (Sclerotinia stem rot) can vary in occurrence and severity each year due to environmental conditions. When present, the disease can reduce yield and quality.

How to identify

White mould infection occurs during the flowering stage of soybeans. When symptoms do show up, they can be seen as “water-soaked” stem lesions that progress around the plant stem. Stems will become bleached and stringy.

Lesions can also occur on pods, petioles, and leaves. Quite commonly, a cotton puff-like mouldy growth can be seen on the plants. Black fruiting bodies called sclerotia (which resemble mouse droppings) can be found inside or outside the stems and pods.

At harvest, infected fields can have black sclerotia remain in the grain sample, as the size and weight are similar to those of the soybean seed, making it hard for the combine to remove them.

Once the infection has become severe, the plant wilts, lodges, and eventually dies. This disease often occurs in patches of the field and is evident when dead leaves are attached to dead plants.

Favourable Conditions:

For white mould to develop, there must be white mould fungus in the field, often from past broadleaf crops; a favourable environment (below 28 °C, cloudy, wet, humid, dense canopy); and a susceptible soybean variety through the plant’s flowering stage.

Typically, a dense canopied crop that favours a high yield potential is at risk of white mould.

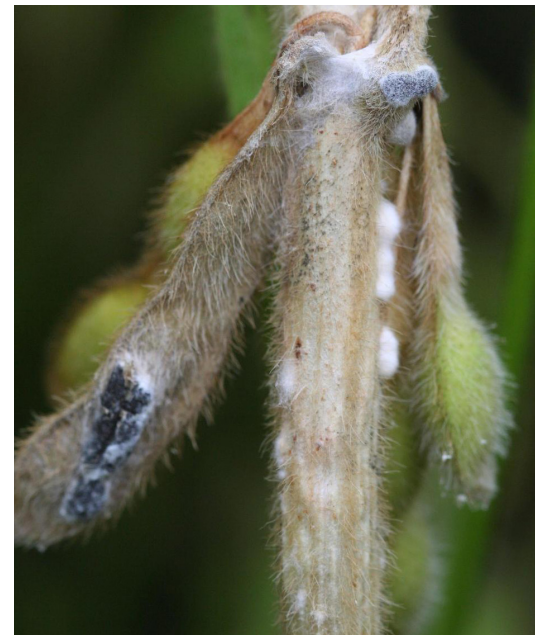
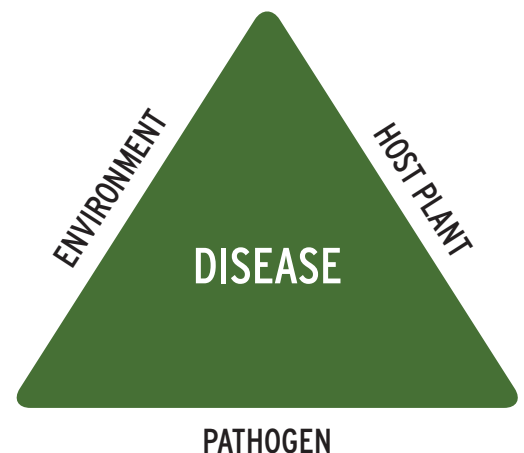


Image by: Daren Mueller, Iowa State University, Bugwood.org

More information

Sporecaster App

An Overview of White Mould



What to do

PRE-PLANT

- Rotate crops; two to three years of a non-host crop such as corn or cereals.
- Select varieties that are less susceptible to disease development.

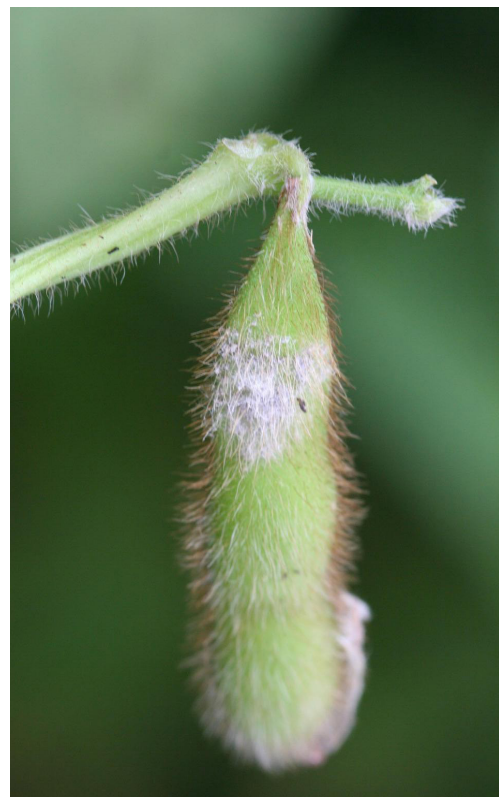
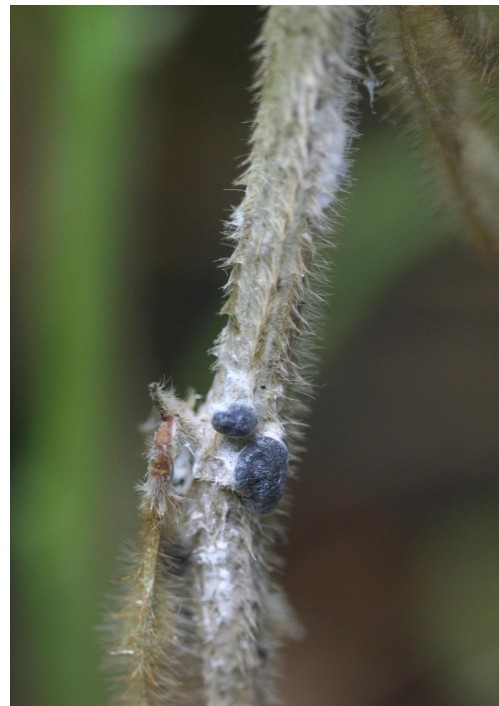
IN-SEASON

- Seed should be free of Sclerotinia (white mould) contamination and infection.
- Plant wider rows or lower plant populations to allow more airflow through the canopy.
- Manure applications on high-risk fields should be avoided, when possible, for fields with a history of the disease.
- Weed control of broadleaf and host weeds.
- Utilize the Sporecaster app to assess the risk of white mould developing.

Apply one or two fungicide passes with the correct active ingredients at the correct time, if warranted (depending on the year, a two-pass system might be advisable).

HARVEST

- If a field has a high occurrence of white mould, it should be harvested last to reduce the spread of sclerotia to other fields via harvesting equipment.
- Ensure correct combine settings at harvest.
- Clean all equipment thoroughly after harvest.
- Keep records of fields with high disease incidence and manage appropriately.



Images by: Daren Mueller, Iowa State University, Bugwood.org