Field Facts: White Mold

White mold has more than 400 alternate plant hosts—including many common weeds and crops—making this disease nearly impossible to eradicate once it infects soybean fields.

- **Common name:** White mold

- **Scientific name:** *Sclerotinia sclerotiorum*

- **Symptoms:** The first signs are gray-to-white lesions at nodes. Lesions rapidly spread above and below infected nodes and are often covered in fluffy, white growths.

- **Conditions for development:** Cool, wet conditions during spring soybean flowering (R1) are ideal for white mold growth. Conditions that increase disease risk also include temperatures below 85°F, frequent rain and relative high humidity.

Fast facts:

- Soybean white mold is an annual threat in the northern United States (north of Interstate 70) from Nebraska to the Atlantic coast, though it may appear anywhere when conditions are right.

- Long-term survival structures of white mold, called sclerotia, function much like seeds, protecting the organism until conditions allow it to germinate.
  - Sclerotia are dark and irregularly shaped, often resembling mouse droppings.
  - Sclerotia allow white mold to survive in the soil for up to 10 years.
  - Only sclerotia within 2 inches of the soil surface can germinate. However, tilling infected fields can bring deeper sclerotia to the surface and propagate the disease.

- Soybean plants are most vulnerable to white mold infection during the bloom stage.

Control tips:

Correctly diagnosing white mold and implementing an effective management strategy before harvest will help minimize the spread and reduce the risk of a severe outbreak in subsequent years.

- Harvest any infected fields last and thoroughly clean equipment after leaving an infected field.

- Rotate with a nonhost crop to reduce disease pressure in a field.
  - Nonhost crops include corn, sorghum and small grains.
  - Susceptible crops to avoid in a rotation include alfalfa, clover, sunflower, canola, edible beans and potatoes.
  - Depending on soybean tolerance, field history and other factors, more than one year away from soybeans may be required to reduce white mold problems.

- Stop the clock on white mold with a fast-acting fungicide. Aproach® fungicide provides uptake in plants that is nearly twice as fast as competitors, thanks to the active ingredient picoxystrobin. Picoxystrobin utilizes four movement properties to quickly surround, penetrate and protect soybean leaves and stems.

- Too often, when growers pull the trigger on a fungicide for white mold, it's applied in the R3 stage, which may be too late. It may be necessary to apply Aproach at R1 and then again at R2 to maximize protection.

- Plant-to-plant infection is possible, but not common. Instead, airborne spores from infected plants land on surrounding plants and use senescing petals as the gateway to infection.

- Diagnosing white mold by foliar damage is not reliable, because the signs are similar to other foliar diseases, including stem rot, Phytophthora root rot, sudden death syndrome and stem canker. Stems should be inspected to confirm white mold diagnosis.
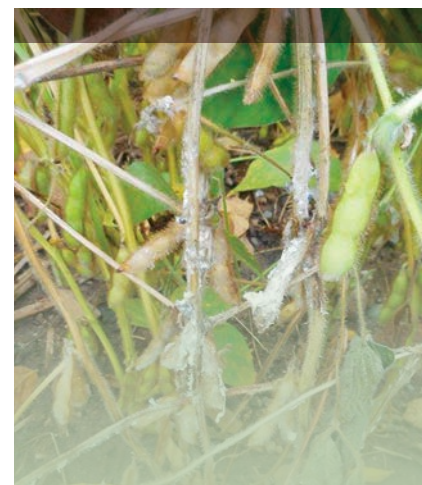
Overwintering white mold

Sclerotia are the overwintering structures of the pathogen. These growths can be found both on and inside of the stems and upon harvesting will fall to the soil where they can survive for several years.

source: https://cropwatch.unl.edu/2022/soybean-disease-update-white-mold

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