

White Mold is a rising concern for Midwest soybean growers

White Mold is a rising concern for Midwest producers. While it can affect a broad range of crops from canola to corn, in recent seasons the greatest yield loss has been noticed in Midwest and Upper Midwest soybean crops. Originally known as Sclerotinia Stem Rot, white mold is a fairly common fungal problem that spreads by infecting the older portions of the plant stems or plant blossom at R1 and R2 (prior to and at flowering). Symptoms to look for include fluffy white lesions at the base of dying plants and a bleached-white appearance of the stem along with the fluffy growth of the mycelium from the fungus. Before symptoms begin to appear, look for tiny, tan, cup-shaped mushrooms (apothecia) on the soil surface. It is the spores of these mushrooms which infect the soybean plants.

Areas at highest risk are high yielding fields, damp fields, fields where the canopy closed early, regions with high humidity and poor air movement, and areas of fields that are protected by a row of trees or are in the shadow of buildings. Certain agronomic practices such as higher plant populations, narrow row spacing, and early planting dates can also encourage the development of the disease.

Dennis Stephens, President of Monty's Plant Food Company, adds that no-till farming practices can also be a compounding situation because it encourages moisture retention and can increase anaerobic activity in the soil. He recommends incorporating Monty's Liquid Carbon* as part of your treatment program, "The carboxyl group in Monty's Liquid Carbon is highly oxidized. By increasing oxygen, you can help interfere with the spore's ability to find a suitable host. Additionally, Monty's Liquid Carbon is able to increase percolation of moisture, allowing the soil surface to dry better, while maintaining enough moisture in the root zone for the plants to thrive." Fall or spring applications of Monty's Liquid Carbon can also assist normal soil biology break down crop residue and boost populations of beneficial microorganisms.

In an interview for this tech bulletin, Paul Esker, University of Wisconsin plant pathologist, says white mold is generally graded according to the severity of an outbreak in a particular field with 0 being normal, healthy plants and 3 indicating infection to the point of severe crop loss. "Once the crop has reached the high Level 2 or Level 3 stage there is no recovering the lost yield. Even at a Level 1 or low-mid Level 2, the blooms and pods that have been lost are gone. However, by remediating the situation, new plant material can form and some yield can be recovered."

Joe Dedman, CCA says, "White Mold, like any disease, will cause a yield drag even if it does not kill the plant. Additionally, some of the cures for White Mold will draw down yield themselves. By applying 2-15-15 as a follow-up to your spray program, you can help the plant maintain as much yield as possible in crops that have been affected either by disease or by the chemical program you select. Monty's 2-15-15 provides nutrients that soybeans need to help maintain blooms and set pods even during a normal year. In a situation where the plant is under stress, the application of our high P & K formulation is critical to manage yield."

*Product not available in all states

When tank mixing any Monty's product, always read and follow label directions of any chemicals you are considering. While Monty's tank-mix applications are suitable for many farm chemicals, we recommend conducting a jar test and a strip test to insure compatibility. Monty's products are designed specifically for foliar feeding applications; for plant growth, fertility and soil conditioning purposes. Monty's fertility products cannot be guaranteed or claim to provide better results when used in conjunction with other farm chemicals. Contact your dealer if you have questions concerning the use of Monty's products.



Monty's Best Management Practices for White Mold

- Scout for the appearance of apothecia mushrooms regularly, particularly in wet areas, shaded areas, in areas prone to retain moisture or morning and evening fog, or where the canopy has closed.
- Apply 24 ounces of Monty's Liquid Carbon* to areas where mushrooms have been found or where formation and growth of apothecia mushrooms are likely (this application may be tank-mixed with most farm chemicals).
- Apply 24 ounces per acre of Monty's 2-15-15 to the foliage of plants following application of labeled chemical controls for white mold.
- Begin a regular soil management program in the fall or spring using Monty's Liquid Carbon*

