



CROP ALERT

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Fungicides on Corn and Soybeans

Early corn fields have reached the tasseling stage and many soybean fields are starting to canopy as they continue to move through the early reproductive growth stages. With the disease issues last season many farmers have already begun their fungicide applications, and others are seriously considering doing so. However it is important to remember that foliar fungicides on corn and soybeans generally will only pay for themselves on 1 out of every 4 acres. With soybeans at ~\$10-12/bu and corn at ~\$3-4/bu applying foliar fungicides will probably not pay for themselves unless:

- A specific disease risk is present at a vulnerable crop growth stage (see the White Mold example below).
- Weather conditions favor disease development. The current forecast does.
- The corn or soybean variety is vulnerability to the disease. Even moderate resistance can increase yield more than a foliar fungicide application.
- The field location is more likely to be infected. A breezy hillside is at less risk than a low floodplain that holds onto the morning dew.
- Cultural practices have increased disease risk. Reduced tillage, planting continuous corn or soybeans, over-applying nitrogen fertilizer, and in some cases narrow row spacing all increase the risk for disease development.
- The disease can actually be controlled by a foliar fungicide. Most soil borne pathogens CANNOT be control by applying a foliar fungicide (*Figure 1*). Varietal selection for disease resistance and fungicide seed treatments are much more likely to reduce soil borne diseases on all crops.

Figure 1: Phytophthora on Soybean



Source: [University of Illinois](http://www.illinois.edu)

For a current list of fungicides recommended for different diseases in NY check out these links for [corn](#) and [soybeans](#), authored by Gary Bergstrom of Cornell University.

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White Mold Weather

The warm, wet, and humid conditions are perfect for white mold to become an issue this year. Many of our soybean fields are flowering and canopies are closing, making great conditions for the tiny white mold mushrooms (*Figure 2*) to emerge and release their spores up into the canopy. These spores land on flowers and feed on the decaying petals and gain access and infect the rest of the plant. How can we prevent this from happening? Many cultural controls could have been implemented. These would have been longer rotations, planting the highest tolerant seed available, and utilizing wider rows to get more airflow.



Figure 2: White Mold Mushrooms

Source: Mike Stanyard

If you have a history of white mold, what can you do now? There have been a couple crispy soybean fields out there lately. Some of these were unintended, but others were on purpose. Cobra herbicide is labeled to spray over soybeans to thin the upper leaves allow more airflow down into the canopy, reducing optimal conditions for white mold. Fungicides are another option. We have some products that are now labeled for suppression of white mold. The challenge is that a fungicide needs to protect every flower. Soybean plants continuously flower. White mold only needs to get on one unprotected flower and the game is over. Therefore, you will need a minimum of two and possibly three applications to protect every flower on a plant. We have heard that some fungicides for possible white mold went out last week. Some of these are Topsin, Endura, Proline, and Approach. Some of these fields are into full flower it may too late in some situations. Please let us know if you have plans to do any fungicide spraying so we can follow up with any results, good or bad.

Soybean Aphids On the Rise

It is time to get out in the soybeans and check for soybean aphids (SBA), *Figure 3*. We started seeing some winged forms about three weeks ago, small populations the last couple of weeks, and now reproduction is in full gear in some hot spots. Some threshold populations have been reached (250/plant) and some spraying has begun around the region. The majority of our soybeans have begun to flower which is a crucial stage to keep SBA below the economic threshold. When scouting soybeans, focus your attention on the top unfurled trifoliolate and the first expanded young trifoliolate for feeding aphids. This is the most tender tissue and more attractive. You may see some



Figure 3: Soybean Aphids

Source: Mike Stanyard



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winged forms but the majority will be light green and wingless. You will see larger ones surrounded by lots of its young. All are feeding so you need to count them all. Remember these are all females and all will be reproducing! They give birth to live young, enabling the population to quickly increase (up to 10X in one day). We are seeing some natural enemies such as ladybird beetles, which can control SBA numbers when populations remain low. However, if SBA populations increase rapidly and jump above threshold, an insecticide application is warranted. The cool nights and torrential rains in the past few days have knocked the aphids back some, but be sure to scout your soybeans as the weather dries out.

Corn and Soybean Yield Contests Reminder

Even though we got off to a slow start, there are some really good looking corn and soybean fields out in the region. The combination of timely July rains and warm temperatures has led to some really good growing conditions. We are heading into August with adequate soil moisture reserves which will only help during the grain fill stage. Will there be some record grain yields in NY this year? We hope so.

If you have never entered the state corn or soybean yield contest, maybe this is the year to do it. The National Corn Yield Contest deadline is August 1. The New York Corn Growers Grain Yield Contest rules and entry form can be found and downloaded from the NY Corn & Soybean Growers Association web page at:

<http://www.nycornsoy.org/>.

Entry forms have to be **postmarked by August 18** and sent to Mike Stanyard at 1581 Route 88 N, Newark, NY 14513. Cost is \$30 per entry. The prize for the top corn and soybean entry is an all expense trip for two to the 2015 Commodity Classic in Phoenix, AZ. Good Luck!



National Corn Contest winners Gary & Jay Swede. NY Soybean Contest winner, Brad Macauley, and NY Corn Contest winner, Henry Everman enjoy the 2014 Commodity Classic in San Antonio, TX.