

CROP ALERT

August 01, 2017 *Mike Stanyard & Jodi Letham, Regional Agronomists, Cornell Cooperative Extension*

Soybean Nodulation

Now that soybeans are starting to come around, I have been receiving questions and concerns about the number of nodules on soybean roots. Great to see that more folks are out looking closer at their beans! Saturated cold soils have made it a tough year for the beneficial bacteria to find an appropriate site on root hairs to form nodules. I have seen complete nodulation failures on extremely dry and wet springs and we definitely had a wet one. Shawn Conley from University of Wisconsin does a good job summarizing nodulation questions in his recent article, http://ipcm.wisc.edu/blog/2015/07/the-nebulous-of-non-nodulating-soybean-in-2015/. He states that it is not about quantity of nodules but quality. Remember, when you break open a nodule, it should be pink inside if it is actively producing nitrogen. Purdue University also has a video online called "Soybean Nitrogen Stress After Wet Conditions", http://extension.entm.purdue.edu/pestcrop/2015/lssue15/. They state that during the vegetative stages there should be double the number of nodules as there are trifoliates (ie. V7 should have at least 14 nodules). If nodules are absent or greatly reduced, 50 pounds of N can help the plants along until nodules can get themselves established.

Western Bean Cutworm Scouting



Photo source: Mike Stanyard

We have been catching low numbers of WBC in our pheromone traps across NY.....

until this week! This is not atypical as we have traditionally seen peak flights occur around August 1st. We are only catching males in the traps and it is really only an indication of their presence even though one of our traps was over 200 moths. Now is an important time to look for egg masses. I was able to find a couple at three locations across the region and even one that had just hatched. Egg masses will be white (newly oviposited) to purple (ready to hatch). WBC females prefer to lay their eggs on pretassel

to tasseling corn on the top couple of leaves. See picture of egg masses and young larvae found on Friday. Threshold is 5% or greater of the plants with egg masses. Here is a good link from Chris DiFonzo out of Michigan on how to scout and make insecticide application



decisions, <u>http://msue.anr.msu.edu/news/time_to_scout_and_manage_western_bean_cutworm_in_southern_michigan</u>. Fields in Jefferson County have exceeded the threshold and are being sprayed this week.

Soybean Aphids are Here!

I had heard reports from my colleagues in Oneida and Jefferson Counties about soybean aphids and we found some in Monroe County on Friday. Populations were very low and scattered throughout the field. The winged forms were found with some very small young ones around them. They must have blown in from the north, either Ontario or Michigan. The ants told me exactly what plants to look on. Here is the link to a video the team put together on soybean aphid scouting and using ants to help you, https://vimeo.com/131208222. All aphids were on the newest emerging trifoliate so look there first and don't waste your time on the larger leaves. There were quite a few ladybugs out there so hopefully they will do their job. We are a long way from threshold (250 aphids/plant) but we still have plenty of growing season left.



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Corn Diseases?



Photo source: Gary Bergstrom

With this wet growing season, I have been anticipating corn leaf diseases but it has been quiet so far. Northern corn leaf blight (NCLB) is the biggest threat in NWNY while some low pockets may also see Gray leaf spot (GLS). It is very easy to tell these diseases apart once they get established. NCLB has the large cigar shaped lesions while GLS legions look like wooden matchsticks (see photos). Scouting last week only revealed

some low levels of corn rust. Many fields have begun to tassel (VT) and it is a crucial time for scouting corn and determining if a fungicide application is warranted. Hopefully, you have planned ahead and planted hybrids with the highest level of resistance. Even though spores can move long distances, continuous corn fields and no-till fields with lots of corn residue are also the most vulnerable from local spore development and dispersal. Go to Cornell's Field Crop webpage to learn more about both of these diseases, <u>http://fieldcrops.cals.cornell.edu/corn/diseases-corn</u>.



Photo source: Gary Bergstrom

Lots of Stink Bugs



Photo source: Mike Stanyard

We have been getting phone calls about stink bugs being more prevalent in corn and soybean fields. We have seen their leaf damage in corn and numbers seem to be increasing in soybean. We are seeing mainly the brown stink bug and a few green stink bugs. The brown marmorated stink bug is a third species that will become more prominent later in the summer. The feeding in early corn is obvious now that the leaves have all emerged. The rows of diamond shaped lesions across the leaf is a telltale sign. Stink bugs are more of a concern when they feed on the corn kernels and developing soybean seeds. See this fact sheet from Ohio state for more pictures and management decision making, https://ohioline.osu.edu/factsheet/ENT-48.



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