



I have been getting a lot of phone calls and e-mails the past few days about spider mites in soybean. I really do appreciate the opportunity to visit about pest management with all of you. There are real spider mite problems out there. However, based on today's conversations, I am as worried, as are some of you, that folks are getting carried away by an uncontrollable and perhaps irrational urge to treat spider mites (and anything else with six -eight legs too). I know that some of you have struggled with fields that have been "accidentally" treated and other silliness. On the positive side, I am getting some calls to identify different insects in soybeans. Most of them have been predators and parasites. They are doing a good job in many fields, let them keep doing it.

Just like any insect pest, prophylactic or poorly timed pesticide applications to spider mites can lead to very bad things down the road. A non-amused banker, a need for re-treatment and the development of pesticide resistance are just a few of them. The reports of very bad things happening with the "just in case" insecticide tank mix with glyphosate applications a few weeks ago continue to pop up.

The following is free advise, take it as such.

1) Making a decision to control spider mites

Make sure you actually have spider mites. They are *not* a problem in all areas and all fields. Tap the underside of a leaf onto a piece of paper, the palm of your hand or any other light colored object. The small gray moving bits are spider mites. They need to be there to have a mite problem. Y'all should have got hand lenses back when Asian soybean rust was going to destroy soybean production. Find them and use them. One consultant called; convinced that some people were spraying downy mildew with chlorpyrifos. This would go into the mistake column and underscores the importance of identifying problems prior to treating them.

By the time spider mite damage is bad enough to economically justify their control, localized areas of symptoms can probably be seen from the road. Invest in an eye exam and/or a good set of binoculars. If you see mite problems on the border/etc. then get out and see if they have moved off the edge of the field. I would not be afraid to lose a bit of yield on borders before I pulled the trigger on the field.

Spider mite infestations can, but do not have to, rapidly move across a field. Sometimes the infestation remains localized in pockets or field borders or is very slow to progress. We are watching some infestations like that now at Lamberton. Although the current dry conditions are hindering disease control of the spider mites, predators are very active.

The guidelines provided in http://www.soybeans.umn.edu/crop/insects/spider_mites.htm are as good as anything out there. There is a typo in the "when to treat section" but you should be able to work through it.

The pod set and pod fill period is the most sensitive to stress. Don't panic. Even here, **20-25% defoliation can be tolerated**, this includes spider mite damage to the lower canopy.

Where both mites and aphids occur in a field (eventually, one or the other wins the competition) base the treatment decision on the worst problem. The presence of both species may require a change in pesticide choice.

The earlier you treat mites, the greater the risk for re-treatment.

Do NOT mix a pyrethroid with chlorpyrifos if treating an actual spider mite problem (actually the mix is probably a bad idea - period). The potential flaring effect of the pyrethroid is still there. Mite eggs will not be killed by either product. Some pyrethroids are worse than others but all can flare mites.

On the corn side, I am very concerned with those fields where a double prophylactic treatment of a fungicide plus a pyrethroid insecticide were applied. Potentially, both disease and predator controls for spider mites could have been compromised in these fields. After watching a couple of spider mite infestations in corn at Lamberton this week, I have quickly developed a new respect for these arachnids.

2) When to change an aphicide product recommendation because of spider mites.

We are not worried about being able to find a few spider mites. Some mites are in every field, every year. It's a judgment call but I would suggest the presence of lower canopy stippling and webbing on a fairly common basis while scouting aphids as a trigger. It's hard to describe but those of you with a bit of experience will know it if you see it.

This time of year, turn the soybean plant upside down and count aphids from the bottom up. You will find the mites too.

As vegetative growth slows, and winged aphids are on the move, this is the time of year when you can actually get a bit of residual from a pyrethroid so I'd use them if I could.

Regardless of the product used, if hot dry weather continues, recheck fields for spider mites in 7-10 days. Well, curiosity should cause you to check them even if the weather changes. Don't walk away from a sprayed field for the rest of the season.

Regardless of product, water rate becomes increasingly important with hot weather.

3) Keep your eyes open and think decisions through. Sometimes doing nothing is the correct choice.

This is sometimes difficult. In our society, we tend to be problem solvers by nature but some *solutions* lead to bigger problems (Scaring a bear away from your lunch by throwing rocks at it might seem like a good idea at the time. It might work but if it doesn't your stress level will definitely increase and you had better have something a lot more potent in reserve)

Sometimes, the best solution is to watch and do nothing for now.

Hot, tired, dry and cranky,

Bruce