

Just When You Thought It Was Safe, Another Soybean Pest?

DR. DOUGLAS B. JONES

MT. VERNON, ILL.



Being an entomologist, the internal struggle about a new pest appearing in the country is sometimes disturbing. I am very interested in conquering all of the pests so that crops can be produced for maximum profit and ease.

However, if we entomologists are too successful at this endeavor, our services may be seen as unneeded. When a new pest appears, however, it is then that our worth is revealed. When the soybean aphid appeared in the Midwest just a few years ago, it put many of us to work to determine what, why, where and how to combat the small, but prolific, pests.

Another of our duties is to be vigilant and look for the next new pest that might come our way. For soybeans, the next pest might be the trochanter mealybug, *Pseudococcus sorghiellus*.

This insect appears to have been first reported from soybeans in Kentucky during 2008. It has since been found in Iowa and Ohio. It is probably in many other locations, but because of its small size and peculiar habits, it could've easily been overlooked.

Mealybugs are a very odd type of insect. Females are fat, slow-moving creatures that stay on the plant throughout their lives. Males are winged as adults, don't feed, and only serve to mate with the female. Males are not usually noticed because of their small size and short adult life.

Mealybugs are often associated with ant species that protect and spread them so that

the ants can harvest honeydew from the insect. This frequently complicates their control since they can easily move between plants with the ant's help. They are also very prolific and reproduce easily.

Trochanter mealybugs are usually found feeding on soybean roots. They usually have a whitish appearance due to the fluffy waxy secretions that cover their bodies. Their presence was discovered when scientists were trying to determine the cause of potassium deficiency symptoms that, after further testing, revealed no such deficiency.

Thus, if you have soybeans that exhibit the classic yellowing symptoms that are associated with low potassium, it would be wise to pull a couple of plants and carefully examine their roots. A hand lens will be necessary to adequately identify the insect.

At this moment, it is not known what, if any, consequences these new pests will have on soybeans.

Other mealybug species such as the pink hibiscus mealybug, *Maconellicoccus hirsutus*, or the passionvine mealybug, *Planococcus minor*, have had large negative impacts on crops such as banana, citrus, cocoa, coffee, corn, grape, mango, potato and soybean in various parts of the world.

Because of the long history of other mealybugs and crop damage and due to the trochanter mealybug's association with potassium deficiency-like symptoms, soybean growers should probably take notice. Δ

DR. DOUGLAS B. JONES: *Extension Specialist, Integrated Pest Management, University of Illinois*