

A New Pest to Consider: Trochanter Mealybug

A new pest of soybeans has been found feeding on roots of plants in Kentucky, Ohio, and Iowa. This pest is the trochanter mealybug, *Pseudococcus sorghiellus* (Forbes) (Fig. 1 and 2), and it has been found in association with fields that exhibit symptoms similar to potassium deficiency (Fig. 3; e.g., yellowed leaf margins and stunted plants), often in fields that recently hosted alfalfa. Much remains to be learned about this pest species including whether mealybugs cause the yellowing or are more likely to colonize already-stressed plants.



Fig. 1. A trochanter mealybug feeding on soybean roots
(Image from Ohio State University)

This pest was initially found on soybean roots in Kentucky in 2008 by Dr. Lee Townsend (Kentucky Pest News, No. 1176, Aug 25, 2008). Dr. Townsend's reported yellowed leaf symptoms, similar to potassium deficiency and to the yellowing often associated with soybean aphids. It seems that this mealybug species is fairly common on other plant species, reported from Indiana, Illinois, and Pennsylvania. The original record of this mealybug species was from sorghum in Illinois. It is most commonly reported from legumes including alfalfa, red clover, white clover, but it has been found on corn, Johnsongrass, and sorghum, too. It also has been collected from curly dock, milkweed, and plantain; there are some trees on the host list, too. The mealybug species is often found to be tended by ants, which eat the honeydew the bugs excrete and in turn protect the mealybugs from predators.



Fig. 2. Trochanter mealybugs found on soybean roots
(Image from Ohio State University)

We are working on a project lead by entomologists at Ohio State University to determine if trochanter mealybug is feeding on soybeans in Pennsylvania. If you find a soybean field with apparent potassium deficiency but the soil tests look normal, consider scouting for mealybugs. Dig 10-20 plants with yellowing symptoms and search the roots for mealybugs (see Figures for reference). Fields with a recent history of alfalfa would be particularly good candidates for scouting. If you have candidate fields or find mealybugs, please contact me (tooker@psu.edu).



Fig. 3. A soybean field showing potassium-like deficiency; similar fields are where trochanter mealybug has been found.

Source: John Tooker, Entomology, PSU Extension