

Soybean aphids starting to increase

August 4 2011

The increase in soybean aphid numbers means producers should step up scouting efforts, but they also should take caution to avoid unnecessary spraying.

"We've started to see an increase in aphid numbers, with some fields approaching or meeting the threshold of 250 aphids per plant," said Kelley Tilmon, South Dakota Cooperative Extension and research soybean entomologist.

Tilmon adds that they have seen a number of fields with fairly low aphid counts per plant, but with a high infestation rate - a high number of plants with at least some aphids on them.

"Those are fields to watch carefully," Tilmon said. "The recent heat may have slowed them down some, but when conditions moderate they can pick up where they left off. If you haven't scouted for aphids in your fields recently, this would be a good time to take another look."

Tilmon encourages producers to scout fields at least weekly.
"Scouting is the most important thing producers can do to help manage this pest," she said. "When conditions are favorable, sub-threshold populations can reach threshold in a matter of days."

SDSU research has established a decision threshold of 250 aphids per plant for South Dakota, which applies through the end of the R5 stage, or the beginning seed/seed fill growth stage in soybeans.

The decision threshold of 250 aphids per plant is not the actual



economic injury level. Tilmon says the injury level is closer to 650 aphids per plant.

"Making a decision to treat at 250 gives you about a week to line up treatment before the injury level is reached," Tilmon said.

Threshold and scouting guidelines are published in SDSU Extension Factsheet FS 914. Producers can also visit the Northern Plains IPM Guide for Cooperative Extension Service advice on the biology and management of a number of soybean insects, available on the web or as free downloadable apps for iPhone and Droid.

At this time of year, Tilmon cautions producers to weigh several factors when deciding whether to treat.

"The economic injury level we use is calculated to balance potential yield gains against the cost of treatment so you come out ahead. You sometimes hear sales advice to throw some insecticide into your tank mix even when aphid numbers are low, 'just in case.' But even when the product is cheap, you can actually be buying yourself extra problems," she said.

Tilmon explains that unwarranted insecticide application early in the season opens the door for aphid resurgence by killing beneficial predators like ladybeetles, leaving the fields unprotected from aphid regrowth and immigration. Later in the season, insecticides may cause secondary pest outbreaks - like spider mites, which can start to be a problem in hot, dry weather.

Tilmon said. "If you need to spray for aphids later in the season, avoid pyrethroids, which can flair mites."



Provided by South Dakota State University

Citation: Soybean aphids starting to increase (2011, August 4) retrieved 3 May 2024 from https://phys.org/news/2011-08-soybean-aphids.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.