

Spider Mites May Be Active In Drought-Stricken Soybean Fields

PRINCETON, KY.

While much of Central and Eastern Kentucky have had ample amounts of rainfall this year, parts of Western Kentucky are well below average rainfall totals. Drought situations attract two-spotted spider mites to soybeans, and infestations have been reported in several Western Kentucky counties. Growers in these drought areas should be scouting their fields for signs of this pest, said Doug Johnson, extension professor with the University of Kentucky College of Agriculture.

"There are big sections of the Purchase Area and the western Pennyryle Area that are in a drought," he said. "As long as the area's in a drought, we're at an elevated risk for spider mites."

Spider mites feed on plants by piercing a leaf's cell and sucking out its contents. The empty cells turn into a white or yellow spot due to the mites removing the cell's green chlorophyll. As the damage increases, leaves turn from a dark green to yellow to orange, then brown and drop off the plant.

Soybeans are more susceptible to spider mite infestations during a drought because the dry weather increases spider movement from nearby plants that have dried out. A drought makes soybeans more palatable for the mites, and it tends to kill fungal diseases that are responsible for mite control.

Spider mites closely resemble spiders but are difficult for the naked eye to see as they only grow to 0.002 inches in length. Producers should examine the undersides of leaves in the lower canopy of plants located around the edge

of the field or near waterways for mites or leaf discoloration. One way to find the tiny pests is to shake the plants over a white sheet of paper and look for tiny specks crawling on the paper. If mites or damage are found, producers should continue to look for them higher in the plant canopy and scout nearby plants, moving further into the field to determine the extent of the infestation.

"Treatment is only warranted when there is a 10 to 15 percent reduction in the effective leaf area," Johnson said. "It's important for growers to detect the damage when it's in the lower portion of the canopy so they can protect its middle and upper sections from the pest."

If growers find enough damage to warrant a treatment, they should use a miticide containing either the ingredients chlorpyrifos, dimethoate or bifenthrin. However, many of these products have application restrictions. It is important to read all labels before making a purchase or application. Producers must thoroughly apply these products to infested plants because they must have direct contact with the mites to kill them.

Johnson said most pyrethroid insecticides are not recommended for mite control and could even cause an increase in mite populations if used.

For more information on controlling spider mites, view Johnson's complete article in the July 27 issue of Kentucky Pest News located online at <http://www.ca.uky.edu/agcollege/plantpathology/extension/kpn/current.html>.

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