## **Spider Mites Attack Soybeans Already Hit By Drought**

COLUMBIA, MO.

Spider mites are destroying soybean fields already hit by drought, a University of Missouri entomologist told a meeting of certified crop advisers (CCA) at MU Bradford Research Center.

Anyone with soybeans should be scouting their fields closely every day, said Wayne Bailey, MU Extension pest management specialist.

"If you are not getting down under the plants, the first thing you may see are bean leaves changing color," Bailey said. "Dying plants first take on a grey cast, then yellow. After that the infested leaves bronze and fall off."

Left untreated, soybean plants die.

"The two-spot spider mites live in grass, but move into the edge of fields and work their way across," Bailey said. They start from roadside grasses or from grass waterways that cross the fields.

"I'm getting most calls from northwest and northeast Missouri," Bailey said. "There's a lot of spraying going on."

The spider mites are so tiny they are almost impossible to see without a microscope. They stay on the underside of the leaves, so you must look there, Bailey said.

"A common scouting method is to lay a sheet of white paper under a leaf, then tap the top. If tiny yellow specks drop onto the paper, you have spider mites. You must look close to see the black spot on each side of the body."

There are many insecticides for control, Bailey said. Local applicators will know what is working. Bailey favors older pesticides such as Lorsban or dimethoate. They kill spider mites, but don't knock out beneficial insects such as ladybugs.

Spider mites are common during drought.

"They suck juice out of the leaves," Bailey said. "Even heavy dew will slow them down."

When spraying, don't skimp on water, Bailey said. "Apply 15 gallons per acre. With the mites hiding under the leaves, it takes more water."

Aerial applicators can get by with three gallons as the aircraft prop wash turns the leaves upside down in the flyover. "Airplanes give very thorough application," he said.

Scout bean fields early and often. Several insects become potential pests in dry weather. By looking early in the morning or late in the evening you may see more activity. During the day, bugs hole up.

However, spider mites work in the heat of the day, Bailey adds.

The annual pest management field day at Bradford Farm gives CCA members who work for local farm supply companies a chance to earn required educational credits.

New pests and new controls are discussed. That includes weeds and pathogens as well as insects.

Wagon tours of research plots give previews of new materials being studied.

Kevin Bradley, MU weed specialist, said lack of rainfall hampered activation of pre-emergence herbicides. "Don't give up on pre-emergence applications after one bad year," he warned.

Laura Sweets, MU plant pathologist, said dry weather has cut down on fungal diseases attacking corn and soybeans.

Bradford Farm is one of 20 research centers across the state. They are part of the MU College of Agriculture, Food and Natural Resources.

Bailey in his wrap up on insects said. "One good rain will solve a lot of spider mite problems – and other problems."  $\Delta$