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Abstract
Adding insult to injury, the dry conditions that many growers are experiencing in eastern Iowa and Illinois are bringing additional problems: two-spotted spider mites. These eight-legged arthropods feed on a variety of plants and are typically not a pest of soybeans during cool, humid summers. Under these conditions, the mites are kept in low numbers by fungi that attack arthropods. When this control is disrupted, spider mites are capable of reproducing quickly in large numbers.

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If left untreated, outbreaks can lead to significant yield losses. The current forecast for Iowa, especially the eastern part of the state, indicates limited rain in the form of thunderstorms. Even if growers receive significant rain they should scout now for spider mites.

At first glance, the yellow soybean leaves produced by spider mite injury look superficially like herbicide injury or a foliar disease; however, tiny yellow spots, or stipples, on leaves are characteristic signs of spider mite injury. As the injury becomes more severe, leaves turn yellow then brown or bronze, and finally die and drop off. When mites injure soybeans, the plants mature early, have increased shattering, produce smaller, often wrinkled seeds. Early and severe mite injury left untreated can reduce yields. Mite injury, occurring during late vegetative and early reproductive growth can reduce soybean yields by 40–60 percent. Soybean plants can recover from substantial amounts of mite injury after treatment, although
less compensation is possible in later soybean developmental stages.

Under drought conditions, treatment is recommended if leaves in infested areas are stippled and live mites are present. Before treating, check the entire field (and adjacent fields) for mites. Under very dry conditions, mites usually will occur throughout the field and spot treatments are unlikely to prevent the infestation from spreading. If mites are found throughout the field (even in low numbers) in addition to the more heavily infested areas, treat the entire field. Closely monitor treated fields for reinfestations. Avoid unnecessary sprays, but treat before injury becomes severe and leaves drop. Carefully check for harvest intervals on insecticides used if treatment is warranted. Insecticides labeled for mites in soybeans are Lorsban and Dimethoate.

Read and follow all label directions. Mite control can be difficult, and more than one application may be needed. Later in the season, spraying becomes difficult as canopies close and less effective as plants mature (yield protection decreases).

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