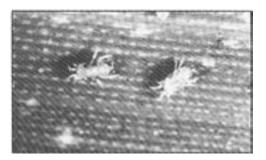
University of Wyoming

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Banks Grass Mite

Order: Family: Metamorphosis: Mouthparts: Acarina (mites and ticks) Tetranychidae (spider mites) None (egg-immature-adult) Piercing and sucking in nymphs and adults



BANKS GRASS MITE, *Oligonychus pratensis*, see color print, Fig. 12, on publication B-1013.

Spider mites, including the Banks grass mite, are not insects but are closely related to ticks, spiders, and harvestmen. They have eight legs and produce webbing on the undersides of leaves. Banks grass mites are found on many crops and are particularly troublesome on corn and drought-stressed turf grasses.

Body Form

Eggs: Eggs are spherical and yellowish. They are very small (less than 1/32 inch in diameter) and are laid within the area of mite activity.

The Young: The general appearance of young Banks grass mites is similar to adults, but they are smaller.

Adults: Adult Banks grass mites are very small, approximately 1/32 inch in length. Their bodies are oval and vary from green to brown in color. They have four pairs of legs and a row of dark spots, brown to reddish brown, on either side of the abdomen extending from near the head to the end of the abdomen. The number and position of the spots are one feature in distinguishing Banks grass mites and two-spotted spider mites. They do not have wings.

Life History

Females and eggs overwinter in sheltered sites like plant debris. They become active in early spring. Eggs are laid on the undersides of leaves and hatch in 3 to 10 days during spring and summer conditions. Banks grass mite habitat is similar to that of the two-spotted spider mite. The mites can be found open on a leaf or under a protective webbing of silk when populations are high. There are multiple generations per year; one generation can be completed in 10 days during summer conditions. All life stages can occur on the same leaf.

Plant Injury

Banks grass mites and other spider mites pierce plant cells and suck out the liquid contents. The leaves then become covered with chlorotic spots. With continued feeding, more damage occurs, and the entire leaf may die back. Banks grass mite activity starts on the lower leaves and moves upward. If leaf damage is severe, fruits may be undersized or fail to form. Banks grass mites are found on many crops and are particularly troublesome on corn and drought-stressed turf grasses.

Management

Yellow spotting and silvery appearance on the lower leaves of plants are indicators of Banks grass mite and other spider mite activity. Water-stressed plants associated with hot, dry weather can be particularly susceptible to mite feeding. When damage is suspected, plants should be monitored at least weekly. When searching for mites, check the underside of leaves near the base of a plant. Initially, concentrate on leaves with damage symptoms. Look for webbing but also look on leaves without webbing. Webbing often goes unnoticed when mite populations first establish. Once mites are detected, a random sample of leaves should be inspected to determine the extent of activity in the field. Mites will appear as small moving dots. Shaking foliage onto a white piece of paper may be helpful because mites will be more visible against a white background.

Banks grass mites are often kept under control by predatory mites, thrips, and minute pirate bugs. At times, miticide use is warranted on corn, particularly during hot, dry weather. It is important to distinguish the Banks grass mite from the two-spotted spider mite because the efficacy of miticides varies in controlling these two species. Plantings may require increased miticide use if plants are water stressed and high temperatures are prevalent. Cultural practices that encourage plant health, such as the avoidance of plant water stress, will reduce the likelihood of Banks grass mite problems.

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