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NEWS RELEASE

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Spider Mites in Kern County Landscapes

Spider mites are related to insects, and include plant-feeding species that cause yellow stippling or bronzing of leaves. We often see effects of their feeding on landscape plants during summer. Small herbaceous plants can be killed, but most larger trees and shrubs can withstand a high spider mite population without long-term effects. The population can often be reduced without the use of chemicals.

Spider mites, often referred to as mites, are common in low rainfall areas of the West. Spider mites are less than 1/16 inch in length and are visible to the unaided eye, but a magnifying glass or hand lens makes them easier to see. Mite eggs are very small, appearing as translucent white spheres. Several mite species are common in Kern County, especially two-spotted mites, recognizable by the red spots on their backs, and Pacific mites, which spin fine webs which can envelop small plants such as marigolds. Like spiders, mites have two body segments and eight legs. They have a rasping mouthpart with which they scrape the leaf surface and ingest the contents of ruptured cells, causing plant foliage to be bronzed in color, or the leaf surface to be stippled in a pattern of yellow and green. Spider mites feed on many species of landscape plants including needle evergreens, fruit and nut trees, citrus, roses, marigolds, and sycamores.

One reason mites are a relatively greater problem in the arid Southwest than in the eastern U.S. is that absence of rain accompanied by warm temperatures allows rapid reproduction, and time from one generation to the next can be as short as 10 days. Dust and dirt on leaf surfaces reduce the cooling effect of transpiration and favor buildup of mite numbers. Rain or overhead irrigation washes dust and mites from leaves to the ground.

In agriculture, mites can be a serious problem, webbing over leaves, causing premature defoliation, loss of vigor, and sunburn. Fortunately, most landscape plants are fairly tolerant of high populations of mites. Sycamores typically harbor large numbers, one reason leaves turn the yellow-green and bronze colors of late summer. Roses may show a loss of vigor, some leaf drop, discoloration of leaves, and occasionally sunburn. Marigolds and other annual flowers can be killed by mites.

Overhead irrigation or periodically washing plants can often provide sufficient control of mites in landscape settings, even on susceptible plants. Predatory mites and many other insects, such as minute pirate bugs, big-eyed bugs, and western flower thrips, feed on spider mites. Use of broad spectrum insecticides such as carbaryl (Sevin™) or malathion may kill predators, allowing a mite flareup. Selective control of mites is available with miticides, but in residential landscapes, without washing plants, frequent miticide sprays may be necessary and not very effective.

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