

Pest Profile



Photo credit: Merle Shepard, Gerald R.Carner, and P.A.C Ooi, *Insects and their Natural Enemies Associated with Vegetables and Soybean in Southeast Asia*, Bugwood.org

Common Name: Carmine spider mite

Scientific Name: *Tetranychus cinnabarinus*

Order and Family: Acari, Tetranychidae

Size and Appearance:

	Adult	Egg	Larva/Nymph	Pupae
Length (mm)	0.4 mm	0.14 mm	0.14 to 0.4 mm	N/A
Appearance	Carmine spider mite females are red, oval shaped. Females have two or four dark, dorsal spots. Males are smaller, have slightly pointed abdomens.	Eggs are spherical, clear, and colorless when laid but become pearly white as hatch approaches.	Larvae are not much bigger than eggs. The six-legged larvae are colorless except for their carmine eye spots. Nymphs are eight-legged with two instars. Both instars are oval, red sometimes spotted, and slightly smaller than adults.	

Type of feeder (Chewing, sucking, etc.): Piercing sucking (adults and nymphs)

Host plant/s: Violets, chickweed, pokeweed, wild mustard, and blackberry are probably common hosts from which infestations spread to nearby crops. Some sources estimate hundreds of plants are hosts to this pest.

Description of Damage (larvae and adults): Feeding on corn and sorghum usually occurs on the undersides of leaves, where spider mites pierce the epidermis and extract sap. Lightly infested leaves have a stippled appearance; heavily infested leaves turn completely pale and dry up. The entire plant may die. The undersurfaces of the leaves usually have silken webs over which the mites crawl. A heavily infested plant, however, may have webs all over it, including the grain heads or ears. A rapid increase in spider mite populations is closely associated with drought conditions and symptoms are very similar from a distance.

Carmine spider mite damage to strawberries appears as stippling, scarring, and bronzing of the leaves and calyx. Yield loss is detectable at all mite infestation levels exceeding one mite per leaflet. Plants are less sensitive to mite feeding after initial berry set. Substantial yield loss results from 15 to 20 mites per mid-tier leaflet after berry set. Plants that sustain infestations greater than 75 mites per leaflet may become severely weakened and appear stunted, dry, and turn red. This pest is global, therefore many ornamental and crops are subject to damage.

References:

Phillips, P. (2015, November 6). *UC IPM Pest Management Guidelines*. Retrieved from Agriculture and Natural Resources, University of California: <http://www.ipm.ucdavis.edu/PMG/r734400111.html>