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Introduction to Mites | Broad Mite | Cclamen Mite | Twospotted Spider Mite

TWOSPOTTED SPIDER MITE

SCIENTIFIC NAME: *Tetranchus urticae* Koch
CLASS: Arachnida
ORDER: Acari
FAMILY: Tetranchidae

Twospotted Spider Mite
From: Universit of California

Twospotted Spider Mite and Eggs
From: Universit of Wisconsin Urban Horticulture

DESCRIPTION

Adults: The eight-legged adult can be pale green, greenish amber, or ellowish. Usuall having two (sometimes four) black spots on top, the twospotted spider mite is about 0.4 millimeters long.

Eggs: The spherical egg ranges from transparent and colorless to opaque straw ellow.

Larvae: The si“-legged larva is colorless, pale green, or ellow.

Nmphs: Similar to the adult e“cept in sie, the nmph has eight legs and is pale green to brownish green. Large black spots ma develop on each side.

BIOLOGY

Host Plants: Twospotted spider mites have been reported on over 300 host plants, that include over 100 cultivated species. Violets, chickweed, pokeweed, wild mustard, henbit, vetch, and blackberr are common foci from which infestations develop on nearb crops.

Damage: Twospotted spider mites pierce the epidermis of the host plant leaf with their sharp, slender mouthparts. When the e“tract the sap, the mesophll tissue of the leaf collapses in the area of the puncture. Soon a chlorotic spot forms at each feeding site. After a heav attack, an entire plant ma become ellowed, broned, or

killed completel. The mites ma completel web over entire plants.

Life Ccle: Twospotted spider mites are important pests on more crops than an other arthropod in the Southeast. Though insects and mites are in a group called the Arthropoda (meaning jointed foot) because jointed legs are common to both, spider mites are not actuall insects. The are more closel related to spiders, and the derive their name from the thin web which some species spin.

In North Carolina, twospotted spider mites overwinter as adults in the soil or on weed hosts such as violets, henbit, and hollhocks. In mild winter weather, twospotted spider mites continue to feed and la eggs, although development in the winter is much slower than in the summer. From the eggs hatch si“-legged larvae. The develop into eight-legged nmphs which pass through two nmphal stages. After each larval and nmphal stage, there is a resting stage. The adults mate soon after emerging from the last resting stage, and in warm weather the females soon la eggs. Each female ma la over 100 eggs in her life and up to 19 eggs per da. Development is rapid in hot, dr weather. Each generation ma take as man as 20 or as few as 5 das to mature.

The often damage one species of plant quite heavil and then disperse to other hosts. When a plant is heavil damaged, the mites migrate to the outer peripher of the plant. From here, even the gentlest of breees can carr them a significant distance to attack new hosts.

MANAGEMENT STRATEGIES

Cultural control: If spider mite infestations are detected earl enough, a dail misting or spraing with water can be an effective control.

Pesticides: The use of foliar insecticides in hot, dr weather can induce spider mite outbreaks b killing the beneficial arthropods that would normall feed on the mites. In addition, a fungal pathogen attacks spider mites following short periods of cool, damp weather. Certain fungicides can eliminate this fungus and should be avoided for several weeks if plants are infested and such conditions occur.

The resting stages and eggs of the twospotted spider mite are more tolerant to pesticides than the motile forms. Consequentl, a second application of pesticide ma be necessar at 4- or 5-da intervals in hot weather (7 to 10 das in cool weather) to kill those mites that ma have survived the first application. For specific chemical control recommendations, consult the Cooperative E“tension Service.

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