MISSOURI BOTANICAL GARDEN

William T. Kemper Center for Home Gardening

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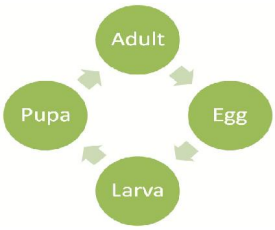
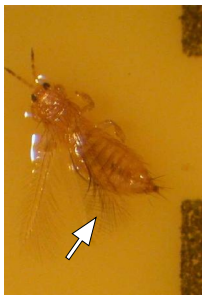
Insect Order ID: Thysanoptera (Thrips)

Life Cycle–Intermediate metamorphosis (between complete and simple). Winged adults mate and lay eggs. Larvae (nymphs) look similar to adults in form and shape but lack both wings and wingbuds. Larvae eat, molt, and grow larger until entering a non-feeding larval stage (pupa) in which wings form and a color change may occur but the form remains essentially the same. Some species have one or more non-feeding pre-pupal stages.

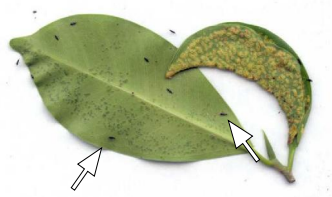


Adults–Minuscule insects (usually 1/16 inch or less). Magnification may be needed to see them. Adults are usually dark-colored, yellow to black. Shape elongated and slender. Two pairs of wings are long and narrow and held over the body. Edges of both forewings and hindwings are fringed or feathery. *(Click images to enlarge or orange text for more information.)*

Wings
long & narrow



Wings with
feathery edges



Black dots are
tube-tailed thrips

Brown dots are thrips

One of the black
dots above

One of the
brown dots above

Eggs–Some female thrips lay their eggs in tiny slits cut into the surface of leaves, fruits, flowers, and stems. Indoors, the eggs can be laid any time of year and hatch within a few days in warm, indoor conditions. In some species the fertilized eggs are all parthenogenic females (able to reproduce without sex) and the unfertilized are males. *(Click images to enlarge or orange text for more information.)*

Thrips' eggs

Larvae–Look similar to adults but entirely wingless and usually pale-colored, white to cream or pale green. After each molt, the larvae are somewhat larger, but magnification is often required to see them. Some species have prepupal stages that are inactive and do not feed. None have wingbuds. *(Click images to enlarge or orange text for more information.)*

Adultlike

Pale colored

Pupae–Full grown larvae, in many species, drop from the host plant to the soil where they burrow down and pupate in a non-feeding larval stage. Others stay on the plant. Some are encased in a cocoon. *(Click images to enlarge or orange text for more information.)*

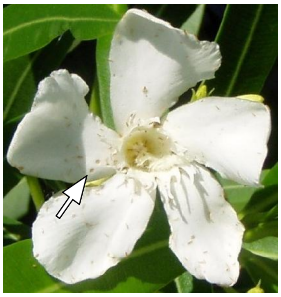
Pupa on host plant

Pupa (left) halfway through color change

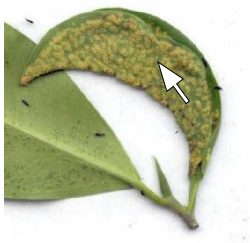
Adult (bottom) emerging from pupal case

Beneficial / Benign Aspects–Species in the Aeolothripidae are predators. They eat other insects or mites. Other species cause insignificant damage to plants or are benign.

Damage–Thrips adults and larvae feed by stabbing with their single mandible then sucking up the juices that ooze from the injury. Flowers or leaves may develop silvery scars that turn brown. Pale-colored flowers are particularly favored. Heavily infested leaves appear dusty or silver and dull, and growing points may become puckered or distorted. Sometimes, warty growth results. Some are predatory, feeding on other insects but particularly on mites. Some prepupal larvae do not feed. Thrips sometimes vector viruses; such as, tomato spotted wilt. They do NOT chew holes. *(Click images to enlarge or orange text for more information.)*



Brown spots on petals



Severe damage

Dusty and dull

Distorted growing tips

Silvery scars

Comments–The word "thrips" is both singular and plural. There is no such thing as a "thrip."

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