

Pest Profile

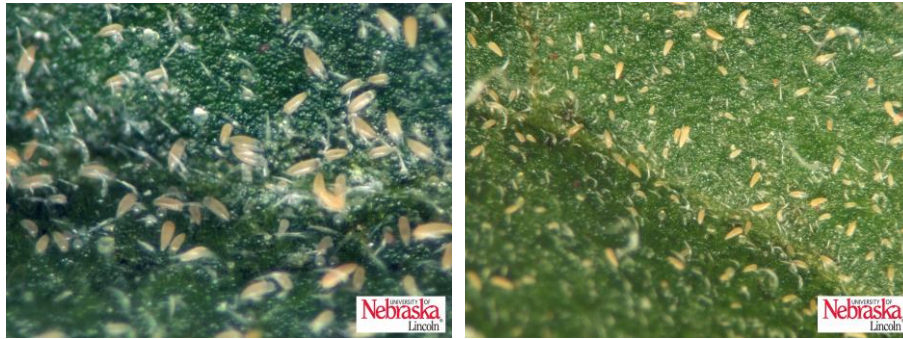


Photo credit: Jim Kalisch - University of Nebraska-Lincoln

Common Name: Tomato Russet Mite

Scientific Name: *Aculops lycopersici*

Order and Family: Trombidiformes: Eriophyidae

Size and Appearance:

	Length (mm)	Appearance
Egg		Round and colorless to white. Laid on leaves and stems of plants.
Larva/Nymph	Smaller than adult	Larvae/First nymphal stage: Larvae are white in color and look similar to the adults, but smaller. Nymph/Second nymphal stage: The same as the larvae but larger.
Adult	0.15-0.2 mm long	Adults are torpedo-shaped with two pairs of legs on the broader head end and long hairs on the tapered, posterior end. They are generally translucent and yellowish but can also be tan, pink, or cream to light gray-brown in color.
Pupae (if available)		

Type of feeder (Chewing, sucking, etc.): Piercing-sucking

Host plants: While named for the tomato, tomato russet mites have a variety of host plants, most of them belonging to the family Solanaceae or nightshades. These include tomatillo, potato, eggplant, poha (cape gooseberry), wild black currant, popolo, wild gooseberry, blackberry, tobacco, bell pepper, cherry pepper, eggplant, Jerusalem cherry, Harry nightshade, black nightshade, horsenettle, morning glory, Jimson weed, Chinese thorn apple, petunia, nightshade, small flowered nightshade, amethyst, and field bindweed.

Description of Damage (larvae and adults): Adults and nymphs feed on all green surfaces of the host plant, typically on the underside of leaves. They puncture the plant epidermal cells to

feed on the plant cell contents. The tomato russet mite usually begins feeding at the base of the tomato plant, and eventually works its way up the plant. Leaves that are fed on may yellow, curl upwards, dry out and drop, especially in hot weather. Petioles and stems that are fed on produce a greasy appearance, which becomes bronzed. Fruits that are fed on take on a cracked and bronzed appearance. If the leaves of the plant have fallen off, the tomatoes may be exposed to sunburn. The greatest concentration of mites is normally the area just ahead of the damaged area. Some studies suggest that as tomato russet mite population density increases, feeding activity of each individual mite accelerates.

References:

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