PREDATORY MITES

Many species of mites occur in greenhouse crops, some predatory and others plant feeders. Mites are not insects, but are closely related to spiders. As adults they typically have round or oval bodies with 8 legs. Common pests in greenhouses are two-spotted spider mite, russet mite, broad mite, Lewis mite, carmine mite and European red mite. Predatory mites are often slightly larger and a different color from pest mites. They tend to move quickly over plant surfaces in search of prey.



Adult predatory mite (right) with two-spotted spider mite (left).

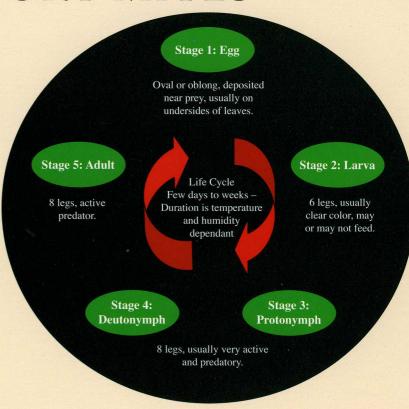


Photo by Jack Kelly Clark, UC IPM Program © C.E. Frank & M. Skinner, University of Vermont, Entomology Research Laboratory 2006

COMMONLY USED PREDATORY MITES FOR GREENHOUSE BIOLOGICAL CONTROL



Neoseiulus (Amblyseius) cucumeris

- Target pest: Thrips immatures, spider mites.
- Tan-yellowish; survives on pollen and spider mites in the absence of thrips.



Neoseiulus (Amblyseius) californicus

- Target pest: Spider mite, broad mite, cyclamen mite.
- Pear shape; clear to pale yellowish-orange;
 slower predation rate; also survives on pollen.



Phytoseiulus persimilis

- Target pest: Spider mites (all stages).
- Bright red-orange; fast-moving; very high predation rate.



Neoseiulus (Amblyseius) fallacis

- Target pest: Spider mite, russet mite, European red mite, cyclamen mite.
- Pear shape; clear until it feeds on prey; high predation rate; survives on pollen without prey.



Hypoaspis miles & Hypoaspis aculeifer

- Target pest: Fungus gnat and thrips larvae and pupae; shorefly larvae.
- Dark tan above, light tan below; soil-dwelling.



Amblyseius swirskii

- Target pest: Thrips larvae and whitefly eggs and immatures.
- Whitish; high predation rate; works in cool winter months; can survive on pollen.