



Cyclamen mite

Phytonemus pallidus

Order Acari, Family Tarsonemidae; cyclamen mites
Introduced pest

Host plants: Not a landscape pest, but can be a pest of annual bedding plants. Greenhouse plants such as African violet, gerbera, begonia and cyclamen, and outdoor perennials such as delphiniums are preferred. Strawberries are partially susceptible.

Description: Cyclamen mites are active in cool seasons such as spring and fall. Adult cyclamen mites are microscopic, elliptical, semitransparent, orange-pink and shiny, with eight legs. The immature mites are glassy white, or transparent pale green. The hind pair of legs in the adult female is threadlike, and those of the male are pincerlike. The mites develop through a six-legged larval stage and a dormant nymphal stage with eight legs.

Life history: Indoors, a generation may require only two weeks. Outdoors, they are most abundant in June and July. Males may not be required for reproduction. Each egg is nearly one-half the length of the female.

Overwintering: All stages.

Damage symptoms: All stages feed in the flower buds and leaf shoots. As flowers and leaves open they are stunted and wrinkled, and may be silvered or browned.

Monitoring: When diseases are not evident on stunted, discolored flower buds and leaf shoots, dissect the shoots carefully under 15x magnification or higher to detect the active mites.

Cultural control: Great care should be taken to avoid spreading this pest in the greenhouse. Mites can easily be moved from infested to uninfested plants on hands and clothing, so always examine infested benches and other hot spots for symptoms of mite infestation last during greenhouse inspections.

Physical control: Infested plants may be treated by immersion in 110 degrees F water for 15 to 30 minutes. Strawberry plants can be treated for 20 minutes in water preheated to 100 degrees F. Success of the treatment depends on careful control of the water temperature.

Chemical control: Because these mites are hidden in buds and shoots, sprays are relatively ineffective.

Biological control: Phytoseiid mite predators, *Neoseiulus cucumeris*, *Amblyseius fallacis*, and *A. californicus*, are effective.

Another predatory mite, *A. fallacis*, occurs on many fruit and other plants throughout the U.S. It feeds on two-spotted and other spider mites. Some populations of this mite have become highly resistant to organophosphate insecticides and survive well in many fruit orchards. Other natural predators of mites include bigeyed bugs,



Stunting damage to terminals of *Delphinium* caused by cyclamen mite. (77)

Photo: John Davidson



Cyclamen mite adult female and egg. (78)

Photo: John Davidson

minute pirate bugs, lacewings, lady beetles, the rove beetle *Oligata oviformis*, and predaceous midges. Mites are also susceptible to viral and fungal diseases.

Plant mortality risk: High for small plants, such as annual bedding plants.

Biorational pesticides: abamectin, horticultural oil, insecticidal soap

Conventional pesticides: bifenthrin, dicofol, fenbutatin oxide, lambda-cyhalothrin