

Predatory mites (*Amblyseius* species, *Hypoaspis* species, *Phytoseiulus persimilis*, *Typhlodromus* species, *Zetzellia mali*, and others)

Identification

Most predaceous mites have a pear-shaped body and translucent colour, although they can also be opaque white when they are not feeding. They are larger than their prey, the adult being 0.25 to 0.4 mm in length, and are typically more motile, active, and shinier than the pest mites. Predatory mite eggs are shiny, oval, and colourless to opaque white.

Preferred food

Predatory mites feed on all stages of plant-feeding mites, including rust mites, two-spotted spider mites, McDaniel mites, and European red mites.

Life cycle

Predatory mites overwinter as adults under the bark and other refuges. They emerge early in the spring and feed on early-season rust mites and two-spotted spider mites. The development time from egg to adult is seven to twenty-one days depending on temperature, allowing for six to ten generations over the course of the year.

Status in ornamental plants

Predatory mites are very common in all nursery and landscape settings and provide more benefits than most managers realize. Many outbreaks of spider mites can be traced back to an application of pesticide that eliminated the predatory mites, allowing pest mites to cause damage in the absence of natural control.

The population of predatory mites can build to large numbers when there is an abundant supply of prey. In some situations, a ratio of 1 predator mite to 30 or 40 spider mites is sufficient to obtain effective control within a few days.

Various species of predatory mites are available from insectaries for commercial release. Each species has a preferred range of relative humidity, temperature, and prey. The supplier can suggest the predatory mite that would be the most effective for each situation.



Above: Release of commercially available *Hypoaspis*.