

Minute pirate bugs (*Orius tristicolor*, *O insidiosus*, *O. minutus*)

Identification

The *Orius* adult is oval, flat, and has a narrow, pointed head. The wings are held flat on the body at rest and are black, with white diamond marks vaguely resembling a pirate flag. Adults are quite small, ranging in size from 2 to 5 mm, and tend to move rapidly.

These tiny insects range in size from 1.8 to 3.7 mm, but are still visible to the naked eye.

Preferred food

Both the adults and nymphs are predaceous sucking insects. The nymphs will feed on thrips, whiteflies, small caterpillars, insect eggs, aphids and adelgids. They can consume up to 30 spider mites per day. When prey is abundant, the nymphs will kill more thrips than it needs to consume.



Above Right: Minute pirate bugs *Anthocoris* spp and *Orius* spp.
(http://www.ipm.ucdavis.edu/PMG/NE/minute_pirate_bug.html)

Life cycle

The adults overwinter under bark or in ground litter. Emerging in late spring, the female adult can live for three to four weeks and lays her eggs into plant tissue. Development time from egg to adult is three to six weeks, producing three to four generations per year.

Status in ornamental plants

Orius are the unknown heroes of nursery production, both in the field and in containers. Adults and nymphs can be very abundant on plants that have thrips, spider mites or aphids. Producers of flowers, shrubs and trees would gain to recognize this small predator, as it can survive on flower pollen when there is no prey.

Minute pirate bugs are available from insectaries for commercial release. They have proven to be effective for greenhouse release to control thrips. *Orius* should not be used in conjunction with predatory mites, as they will also consume the mites.