

Thrips on Boxwood

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We have a Boxwood tree in the garden: a cultivar that's popular as a topiary plant. We just cut it back to control its size and photograph the insects on it, residents and visitors.



We find a species of giant Thrips on this tree and nowhere else.



Most Thrips are just 1-2 mm in length but these reach 6-7 mm.

They lay eggs in a folded leaf. The eggs hatch and go through five growth stages before becoming adult.



Juveniles and adults are found on the same leaf. A generation matures in 3-4 weeks and the cycle repeats. The situation could rapidly get out of hand if it were not for predators.

The number one predator is a 6 mm Mirid bug in the genus *Fingulus*. By the second generation of thrips the nymphs of these bugs appear.



Juvenile bugs (with wing buds) mimic the thrips and live with them. They are a deep reddish colour with long legs. At first sight they look like a thrips, but they have longer legs, are more agile and faster.

Adult Fingulus



The adult bug in the image below was watched as it moved from the back on to the front surface of a leaf where a lone thrips was feeding. It hesitated, and slowly crept halfway across the leaf towards its prey. Then it suddenly lunged forward at a run (like a jumping spider) and stabbed the Thrips in the back before it could move.



Leaf damage



Eggs, early instars and adults on a damaged leaf. Because thrips spend their lives on, or near to, the leaf on which they were born the damage is confined to a few young leaves.



The predator mimics the thrips and lives with them, rather like a farmer and their sheep. When they get hungry they just stab another one. A single *Fingulus* kills and eats almost all the thrips on its leaf in a week or two.

There are two smaller predators that we find associated with the giant thrips and a similar smaller species of about half the size.



A congregation of smaller tube-tailed thrips that share the boxwood tree.



A minute Pirate bug (2 mm): *Anthocoridae Orius* sp. found in damaged folded leaves with the thrips. They share the farm with the Fingulus.

The third predator is a surprise, another thrips, that looks quite different and is adapted as a predator.



Franklinothrips vespiformis is a South American Thrips that now has a tropical world wide distribution of females only. The partly transparent section creates the illusion of a narrow waist: looks like a fast 2.5 mm ant. See ... http://entnemdept.ufl.edu/creatures/BENEFICIAL/vespiform_thrips.htm



Vesiformis has colourful distinctive juveniles.

Websites everywhere list thrips as a problem for gardeners, but in this case nature has balanced the ecosystem with predators and no intervention is required. Spraying would kill the predators and might cause a problem.