

Tiny Invaders

Many times the insect specimens brought in to the MG Office are very small. Let's focus on some of the more common "tiny invaders" (about 1/8 inch or less) that harass our gardens and plants.

Master Gardeners sometimes have difficulty distinguishing between aphids and thrips. Aphids (Order Homoptera) can come in a variety of colors and forms. There are green, black, gray, brown and even red aphids. Many have fuzzy hairs on their bodies. (This last Fall, I had some winged, black aphids with long white hairs on their abdomens flying around our yard.) Aphids always have a specific body shape. The general body form is somewhat like an egg shape, tapering toward the head end. Mouthparts are of the piercing-sucking type.

Thrips (Order Thysanoptera) are always dark, mostly black, and have a long narrow head and body. Their wings are very narrow, all the same length and fringed with tiny hairs. This fringe characteristic gives them their Order name. The wings of aphids are never fringed and the front and hind wings are not the same length. Thrips feed in an interesting manner. They have mouthparts that are file-like. Thrips rasp the plant tissue and ingest what they scrape off. Close examination of the plant with a hand lens will reveal these little raspings. Aphids, on the other hand, pierce the plant tissue and suck out the juices. Even when thrips are abundant, they don't "bunch up" like aphids do on a plant.

Whiteflies (Order Homoptera) are another bane to the home gardener. They also have piercing-sucking mouthparts. The immatures produce a protective wax-like cover over themselves, which makes them difficult to eradicate. Yellow sticky traps work well on the adult whiteflies, as they are attracted to the color yellow. It is usually easy to distinguish between whiteflies and other tiny pests because of their white color and their willingness to fly about the food plant when disturbed.

Flea beetles, because of their black color and tiny size, might not be noticed in the garden until they are abundant and are doing a lot of damage to plants by making myriads of tiny holes in the leaves. The annoying thing about them is that when disturbed, they hop off the plant and escape attempts to control them. Another problem is their life cycle. The tiny pupae of flea beetles hibernate in the soil until spring. When the new crop of beetles emerges, the problem starts all over again. Since they have wings, they can also invade from outside your garden plot.

Fungus gnats are a problem with houseplants. The larvae feed on the roots of plants, causing the plant to languish. They appear as tiny white worms in the soil. The adults are often seen when they fly around the house. They look a great deal like very delicate mosquitoes. Even though they are small, they are unwelcome little "beasties" in our homes.

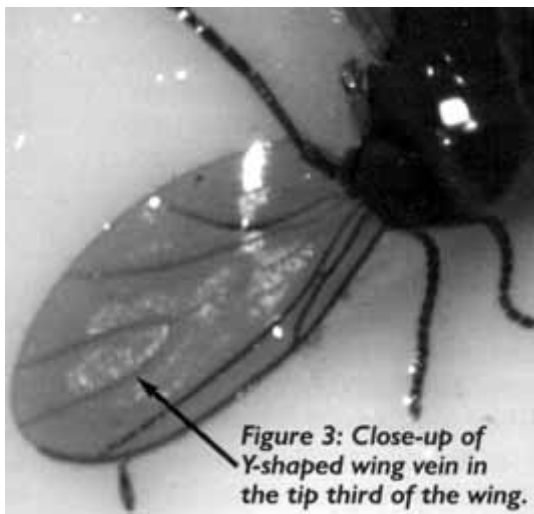
Other tiny invaders can also be found in and around our living environment. Symphylans are found in our greenhouses, tiny grain beetles get into our flour and stored seeds; powder post beetles get into our wood furniture, etc. It is not always easy to see all of the wee insects that are causing us problems (but a hand lens helps!).

When you have identified these or other insects for a client, be sure to consult the PNW Insect Control Handbook for control measures. And remember, always recommend the least environmentally harmful control.



Aphids

Thrip



Fungus gnat



Flea Beetle

Whiteflies



Symphalan