WESTERN FLOWER THRIPS¹

Damage symptoms
Early signs include scarred, stunted and/or distorted foliage or flowers. Whitish, sunken patches on the upper leaf surfaces or flower petals, sometimes with black droplets, are also signs of thrips. Growers should also look for symptoms of virus infection because this species transmits viruses (on page 41).

Plants commonly attacked
Many ornamentals are attacked, in particular chrysanthemum, cyclamen, African violet, portulaca, cineraria, impatiens, ivy geranium.

General characteristics   Mouthparts: Modified piercing/sucking
The yellowish to brown adults are tiny, slender, fast moving insects, about the size of a flea. They often hide within leaf crevices or deep in the flower and are hard to see without a hand lens. Thrips have several generations each year, and populations increase quickly when temperatures are high. Eggs are laid in plant tissue and thus pesticides are not effective against this life stage.

Where to find thrips: USE A HAND LENS
Adults and immatures can be found in flowers, on the undersides of leaves along leaf veins or within leaf crevices. Knock a flower against your open palm or onto a white paper. They will be seen crawling around. Hold a flower in your cupped hand and breathe on it to force thrips out with CO₂. Flying thrips will also be caught on sticky cards.

Management
✓ Inspect plants and cards for thrips to detect infestations early.
✓ Monitor crop plants and/or use indicator plants.
✓ Remove all weeds in and around the greenhouse.
✓ Consider using biological control. See page 60.
✓ Adults are most active in the early morning and evening. Apply insecticides at these times to maximize exposure.
✓ To ensure an infestation is eliminated, make 3 applications, 7 days apart in cool weather, 5 days apart when it is warm.
✓ Rotate class of insecticides used regularly as indicated on label.

¹Frankliniella occidentalis [Thysanoptera: Thripidae]. Other species are found in greenhouses, including Frankliniella tritici (eastern flower thrips), and Thrips tabaci (onion thrips). These cause similar damage, but are usually less serious pests in greenhouses.
Thrips damage on poinsettia: deformed, stunted leaves.

Thrips hiding within an African violet flower.

Thrips damage on impatiens: stunted, deformed leaves.

Western flower thrips adult (top) and larva (bottom.)

Thrips damage: white feeding patches on upper leaf surface with black droplets. These are the excrement left by thrips.

Thrips damage on cineraria: cupped deformed leaves with white patches.