

# Thrips

Western Flower Thrips (*Frankliniella occidentalis*), Intonsa Thrips (*Frankliniella intonsa*), NZ Flower Thrips (*Thrips obscuratus*)

## Damage:

Thrips will feed on strawberry leaves, causing small silvery lines, but the main damage is when immatures feed under the calyx of developing berries, causes the fruit to bronze and crackle.

## Identification:



Thrips are easy to spot in flowers. Is it thrips feeding under the calyx cause fruit bronzing. Fruit bronzed by thrips feeding is unmarketable. Fruit can also be bronzed by heat damage, but this tends to be more uniform in pattern than thrips damage.

## Spread:

Thrips are attracted to flowers to feed on pollen as a protein source, and are hosted by many flowering plants. The adults have wings and can migrate short distances. They lay eggs inside plant tissue, go through several larval stages (whose feeding causes fruit bronzing), then pupate in the soil. Populations can build up to huge numbers, especially during hot weather.

Thrips control in many crops is challenging. They are protected from insecticides as eggs and as pupae.

The mid summer mass migration of intonsa thrips (Auckland and Waikato, maybe in more areas) is particularly challenging to control.

## Control: (also see second page)

Pre-flower	Some light-reflective mulches have been shown to reduce onion thrips finding onion plants. Reflective mulches have not been tested for thrips control in strawberry production in NZ.
------------	---

Flowering and fruiting	<p>Scout for thrips by tapping flowers onto a white paper and by examining developing fruit under the calyx. If using a predator program, establish it early when pest pressure is low. <i>N. cucumeris</i> and <i>A. limonicus</i> will eat thrips nymphs (but not adults). 'Hyper-mite' (<i>Stratiolaelaps scimitus</i>), predatory soil-dwelling mites, and predatory nematodes (<i>Steinernema feltiae</i>) will eat thrips pupae in the soil. Some minute pirate bugs will eat adults. NZ does not currently have available the same species of adult thrips predators as other countries. Sticky tapes with a scented lure can be used to mass trap adult thrips, but this technique does not provide enough control on its own. If using insecticides, chose an effective product from the industry list. Insecticide resistance is a major problem with thrips. Getting good spray coverage (targeting flowers) is also critical.</p>
------------------------	---