

Tyfu Cymru Fact Sheet: Sucking Soft Fruit Pests

Below are some of the common pests found within soft fruit crops, if seen it is best to consult a BASIS trained advisor on how to proceed.

Sucking pests of soft fruit.

Sucking pests are those that bite using specialized mouthparts to feed on sap and plant cells. These pests are often associated with leaf curling, deformed fruit and plant wilt.

TSSM: Two spotted spider mite

TSSM are extremely small pests that feed on a wide variety of crops, its damage is caused by sucking the contents from plant cells leaving pale spots. Infestations are worse in hot and dry weather.



Example of two spotted spider mite on strawberry leaves.

Pest: **Two spotted Spider Mite**

Size: **0.4mm**

Habitat: **Underside of leaves**

Period of main activity: **March to September**

Damage symptoms: **Pale or yellow spots on the upper surface of a leaf, bad infestations cause webbing.**

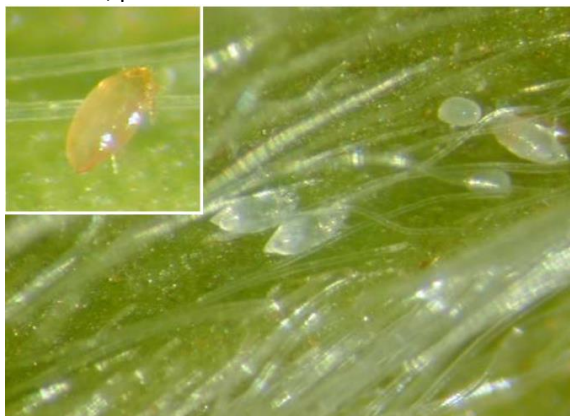


Example of damage and webbing that TSSM cause.

- Each female can lay between 50 and 100 eggs.
- Life cycle length at 25°C is roughly 9 days.
- After September the mites enter diapause (suspended development) because of shortening day length and reducing temperature. When in diapause they turn a bright red colour.
- During diapause they do not feed, lay eggs and as a result acaricides are not effective against them.
- Females overwinter in plant debris around the base of the plants.

Strawberry Tarsonemid mite

Tarsonemid mites are small pests that crawl from plant to plant and can arrive on farm via infested stock. This pest is difficult to eradicate, preventative measures like biocontrol's offer more successful results.



Tarsonemid mite and eggs. (©NIAB EMR)

Pest: **Tarsonemid mite**

Size: **0.2-0.25mm**

Habitat: **Petiole end of leaves along the main vein.**

Period of main activity: **Early spring to winter.**

Damage symptoms: **Twisting, curling and stunting of new growth, browning and drying of fruit.**

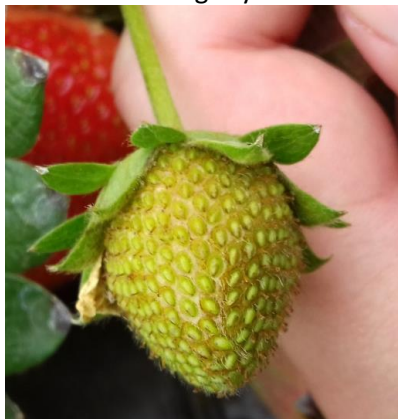


Example of damage caused to strawberry fruit (©NIAB EMR)

- This pest has a very rapid lifecycle under protection and can be spread by staff walking the crop as well as equipment.
- Once plants are infested trusses become heavily distorted, causing yield loss immediately and in following years.
- Females overwinter deep in the crown, eggs (up to 50 per female) are laid mostly along the main vein of leaves when spring temperatures rise.
- Tarsonemid mites can be spread by other winged insects such as whitefly.

Thrips spp.

Thrips are small slender bodied insects that are present in most crops as temperatures increase. Thrips adults feed on pollen, crop damage is caused by oviposition of eggs into tissues as well as contamination. Body colour can vary from dark brown to light yellow.



Example of thrips damage on fruit.

Pest: **Thrips spp.**

Size: **1-2mm.**

Habitat: **Around the flower heads.**

Period of main activity: **March to September.**

Damage symptoms: **Bronzing of the fruit, browning on petals and white flecking on leaves.**



Thrips hidden behind the calyx.

- Thrips females deposit eggs into plant tissue to avoid environmental damage.
- Some species like Western flower thrips are very resistant to chemical insecticides.
- Thrips are attracted to flowers so can establish well on weeds and travel to nearby crop. Keeping weeds under control helps control early development.
- Thrips feeding can cause leaf distortion, stunting and can transmit viruses.

Aphid spp.

There are many species of aphids present in soft fruit crops, all of them damage plants by sucking sap which they then excrete as honeydew and can cause sooty moulds to develop.



Showing typical hiding place for aphid populations

Pest: **Aphid Spp.**

Size: **1-6mm**

Habitat: **Prefer undersides of leaves, behind calyxes.**

Period of damage: **Early summer to late autumn.**

Damage symptoms: **Twisting and stunting of plants, sooty moulds forming on leaves near exposed honeydew.**



Demonstrating winged versions of an aphid population

- Most species are a vector for viruses spreading through the crop.
- Ants may be associated with aphids feeding on the honeydew (sap) the aphids produce.
- Most aphid's sp. breed asexually so a population can build and spread very quickly. When their current host plant is too small for the population winged morphs develop and spread through a crop.
- Good end of season hygiene using aphicides gives a good control for the spring in the following year.

For more information please see the AHDB's crop walker guides at:

<https://horticulture.ahdb.org.uk/publication-category/crop-walkers-guides?page=2>