

# THRIPS ON STONE FRUIT

Thrips, a small insect, can cause damage to fruit, making them unsuitable for export.

## NECTARINES, PEACHES & APRICOTS

### Likelihood of thrips outbreaks

Thrips outbreaks can be very sporadic. In deciding whether or not to monitor thrips in an orchard, the following aspects should be considered:

#### History of thrips damage in the orchard:

If thrips damage occurred in the orchard during the last two or three seasons (or more), chances are that it may happen again and monitoring for thrips should be done.

#### Susceptibility of the crop to economic thrips damage:

Nectarines are very susceptible to thrips damage, particularly during the ripening period shortly before harvesting when silvering occurs (Fig. 1 - 3). Cultivars and/or fruit kinds that flower later appear to be more prone to thrips damage than some of the early flowering ones. This may be because by the time they come into bloom the thrips populations have had time to build up to damaging levels after the winter. In some drier areas, however, early flowering nectarines seem to attract high numbers of thrips, making them prone to early thrips damage.

#### Weather conditions favourable for thrips outbreaks:

Observations in recent years suggest that thrips outbreaks and damage, particularly russetting or silvering during ripening, are more likely to occur during warm, dry seasons and in warm, dry areas. If hot, dry conditions occur, thrips should be monitored in orchards with a history of thrips damage.

### Monitoring

#### Identification of thrips

It is not easy to identify thrips because they are so very small. Western flower thrips (*Frankliniella occidentalis*) causes silvering and russetting in peaches, nectarines and plums. It is a pale straw colour to slightly orange-brown with dark fringes around the wings (Fig. 4). The flower thrips or “kromnek” thrips (*F. schultzei*) is almost identical to the western flower thrips, but it is a dark brown colour with black wing fringes (Fig. 5). Its feeding is thought to be associated with silvering or russetting damage. *Thrips tabaci* is also straw coloured and can be confused with western flower thrips, while *T. simplex* cannot be distinguished from *F. schultzei* with the naked eye. Because of these problems, it may be best to have the



**Fig. 1**  
Early season thrips feeding damage (russetting)  
on peaches



**Fig. 2**  
Silvering on nectarines

thrips found in the orchard identified by an expert before deciding whether or not control is warranted. Otherwise all thrips resembling the descriptions given above can be counted and those resembling the species shown in Figure 7 should be disregarded.

### Method of monitoring

Thrips can be monitored by using sticky traps (blue or yellow) hung in the orchard OR by beating blossoms, foliage or fruit over a white paper, tray or dish. Traps must hang outside the tree canopy.

### When to start monitoring

Much of the economic damage is done during the early stages of flowering, even before flowers open, and fruit set. Monitoring should start at least two weeks before bloom and in crops where silvering or russetting shortly before harvest is likely, monitoring should continue until harvest.

### Interpretation of monitoring results

At present there are no reliable treatment thresholds for thrips. For the moment we have to work on a presence / absence basis. If thrips are present prior to bloom in orchards with a history of thrips damage, control should be considered. Similarly, if thrips persist until ripening in orchards with a history of late thrips damage, control may be required.

## Timing of Control

Because feeding and oviposition damage are done during flowering and fruit set, control should be applied at the very onset of flowering and even just before flowering commences. If conditions are favourable and thrips populations can build up to high levels during the ripening stages of the fruit, it is likely that late damage (silvering) may occur.

**Bees:** Do not spray one week before bees are brought into the orchard or within three days after bees have been introduced. When choosing a product for thrips control

during the flowering period, pay attention to the bee hazard of the available products.

## Control Measures

- Ground cover should not be mowed or disturbed from the onset of flowering until two weeks after blossom.
- Consult relevant export regulations or the DFPT website ([www.deciduous.co.za](http://www.deciduous.co.za)) for information on the names of products permitted on fruit exported to the various markets and their respective withholding periods.
- **Early damage (during flowering and fruit set)**  
Products registered for thrips control on peaches and nectarines are:
  - Hunter (chlorfenapyr) 360 SC at 35 ml/100 L water.
  - Tracer (spinosad) 480 SC at 15 ml/100 L water.
  - Dicarzol (formetanate) 500 SP at 35 g + 200 g sugar/100 L water for suppression of thrips only.

**Note:** Currently there is no product registered specifically for thrips control on apricots.

- **Late damage, i.e. silvering shortly before harvest**

At present thrips control during ripening is almost impossible, due to the length of the withholding periods of the various products, particularly on fruit destined for export. Tracer could be used on fruit destined for the local market only to control silvering close to harvest, since the withholding period for Tracer is 7 days for the local market, compared to the 35 days on fruit destined for the EU. However, fruit prices on the local market may not warrant the expense.



Fig. 3  
Silvering on peaches

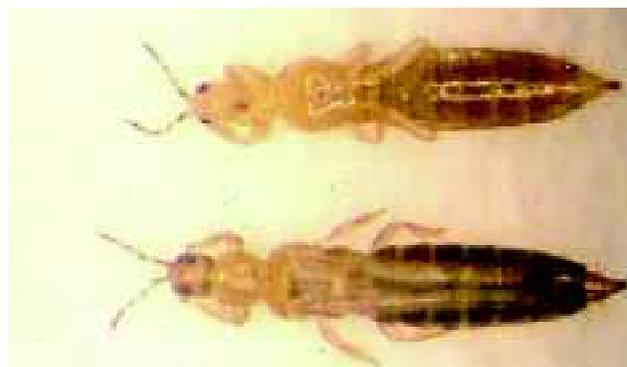


Fig. 4  
Western flower thrips *Frankliniella occidentalis*

# PLUMS

## Likelihood of thrips outbreaks

Thrips outbreaks can be very sporadic. In deciding whether or not to monitor thrips in an orchard, the following aspects should be considered:

**History of thrips damage in the orchard:** if thrips damage occurred in the orchard during the last two or three seasons (or more), chances are that it may happen again and monitoring for thrips should be done.

**Susceptibility of the crop to economic thrips damage:** Plums appear to be very susceptible to thrips damage around flowering. Cultivars and/or fruit kinds that flower later appear to be more prone to thrips damage than some of the early flowering ones. This may be because by the time they come into bloom the thrips populations have had time to build up to damaging levels after the winter.

**Weather conditions favourable for thrips outbreaks:** Observations in recent years suggest that thrips outbreaks and damage, particularly silvering or russetting during ripening, are more likely to occur during warm, dry seasons and in warm, dry areas. If hot, dry conditions occur, thrips should be monitored in orchards with a history of thrips damage.

## Monitoring

### Identification of thrips

It is not easy to identify thrips because they are so very small. Western flower thrips (*Frankliniella occidentalis*) causes silvering and russetting similar to that on nectarines (Fig. 1 - 3), and occasionally also pansy spots (Fig. 6). Western flower thrips is a pale straw colour to slightly orange-brown with dark fringes around the wings (Fig. 4). The flower thrips or

“kromnek” thrips (*F. schultzei*) is almost identical to the western flower thrips, but it is a dark brown colour with black wing fringes (Fig. 5). Its feeding is thought to be associated with silvering or russetting damage. *Thrips tabaci* is also straw coloured and can be confused with western flower thrips, while *T. simplex* cannot be distinguished from *F. schultzei* with the naked eye.

Because of these problems, it may be best to have the thrips found in the orchard identified by an expert before deciding whether or not control is warranted. Otherwise all thrips resembling the descriptions given above can be counted, and those resembling the species shown in Figure 7 should be disregarded.

### Method of monitoring

Thrips can be monitored by using sticky traps (blue or yellow) hung in the orchard OR by beating blossoms, foliage or fruit over a white paper, tray or dish. Traps must hang outside the tree canopy.

### When to start monitoring

Much of the economic damage is done during the early stages of flowering, even before flowers open, and fruit set. Monitoring should start at least two weeks before bloom and in crops where silvering or russetting shortly before harvest is likely, monitoring should continue until harvest.

### Interpretation of monitoring results

At present there are no reliable treatment thresholds for thrips. For the moment we have to work on a presence / absence basis. If thrips are present prior to bloom in orchards with a history of thrips damage, control should be considered. Similarly, if thrips persist until ripening in orchards with a history of late thrips damage, control may be required.



Fig. 5  
Flower (“kromnek”) thrips *Frankliniella schultzei*

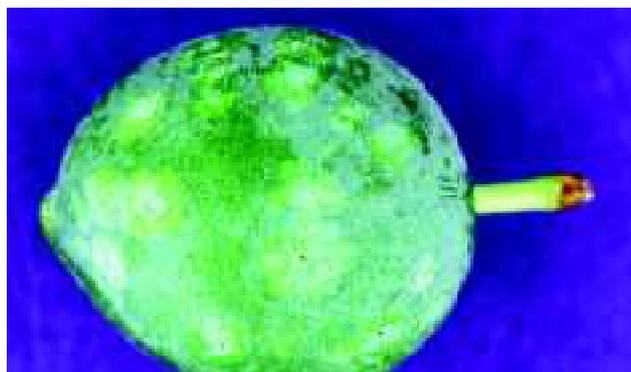


Fig. 6  
Pansy spotting on plums due to ovipositioning by Western flower thrips

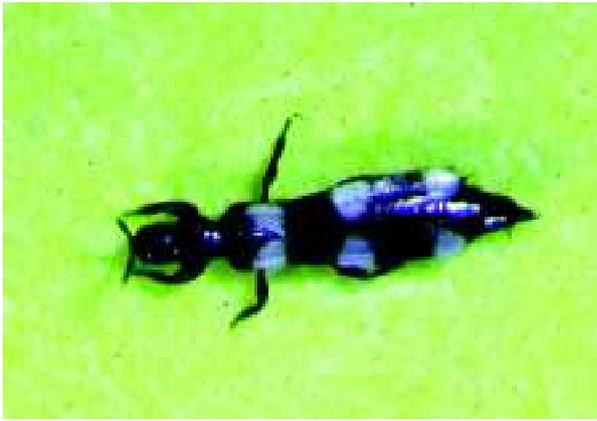
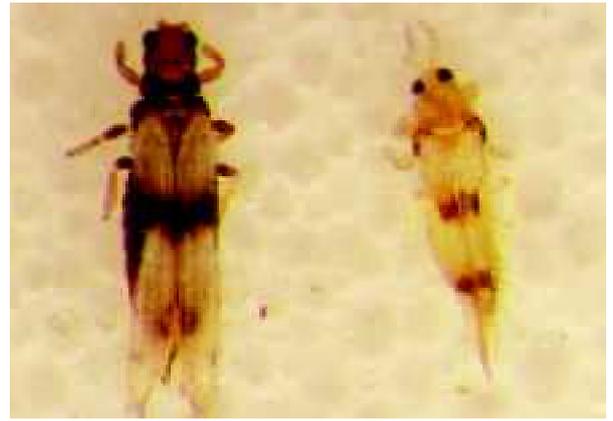
## Timing of Control

Because feeding and oviposition damage are done during flowering and fruit set, control should be applied at the very onset of flowering and even just before flowering commences. If conditions are favourable and thrips populations can build up to high levels during the ripening stages of the fruit, it is likely that late damage (silvering and/or russetting) may occur.

**Bees:** Do not spray one week before bees are brought into the orchard or within three days after bees have been introduced. When choosing a product for thrips control during the flowering period, pay attention to the bee hazard of the available products.

## Control Measures

- Ground cover should not be mowed or disturbed from the onset of flowering until two weeks after blossom.
- Consult relevant export regulations or the DFPT website ([www.deciduous.co.za](http://www.deciduous.co.za)) for information on the names of products permitted on fruit exported to the various markets and their respective withholding periods.
- **Early damage (during flowering and fruit set)**  
Products registered for thrips control on plums are:
  - Hunter (chlorfenapyr) 360 SC at 35 ml/100 L water.
  - Tracer (spinosad) 480 SC at 15 ml/100 L water.
- **Late damage, i.e. silvering shortly before harvesting**  
At present thrips control during ripening is almost impossible, due to the length of the withholding periods of the various products, particularly on fruit destined for export.



**Fig. 7**  
**Thrips that do not cause fruit damage – disregard when monitoring**

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