

RED SPIDER MITE

Tetranychus cinnabarinus (Boisduval)

Also known as the red form of *Tetranychus urticae* Koch

1 PEST PROFILE

1.1 Distribution and status

This mite can occur as a pest on citrus throughout southern Africa but is most common in the Western Cape where summers are hot and dry. It can often be found in citrus nurseries. It has many alternative host plants.

1.2 Description

The adult female is oval in shape, reddish-brown and approximately 0.5 mm long. The male is smaller, more pointed posteriorly and more active than the adult female. The males and nymphs are greenish-white. The eggs are spherical, amber-coloured and without any attachments. They are laid singly on the leaf surface or on webbing created by the mites on infested areas. Apart from the egg colour and shape, the dorsal body setae of the adult female red spider mite help to distinguish it from the citrus red mite because they do not arise from protuberances on the abdomen as in the case of the latter mite.

1.3 Infestation site on tree

Red spider mites can be found on leaves and fruit where their feeding activity results in blemish symptoms. The proximal area on the ventral side of leaves is usually favoured by these mites.

1.4 Damage

1.4.1 Symptoms

On foliage the mite causes brown stippling and sometimes mesophyll collapse. Yellowing of the upper leaf surface near the base often occurs. Edges of the leaves may curl downwards. Fine webbing can be noted in infested areas.

Fruit damage is most severe on young, green fruit and appears as a bronze or dark brown russeting at colour-break. Damage to mature

fruit is less severe and appears as a silver to bronze russet. This symptom does not disappear with time as in the case of citrus red mite, and can result in damaged fruit being culled from export in the packhouse.

1.4.2 Seasonal occurrence

These mites are most common from January to March but may also occur on Valencia oranges in June to August. Optimal development conditions are between 29°C and 32°C together with low relative humidity.

2 MANAGEMENT ASPECTS

2.1 Infestation/damage assessment

Nursery trees, as well as non-bearing and bearing trees should be included in the assessments.

2.1.1 Inspection

Foliage and fruit should be inspected every two weeks from December to July. Particular attention should be given to the lower surface of leaves.

2.1.2 Treatment threshold

Apply treatments at the first signs of fruit russet or when a progressive increase in infestation has reached the level of two to four adult female mites per leaf. Use the lower threshold when trees are stressed.

2.2 Control options

2.2.1 Biological

Predation by *Stethorus* spp. beetles, lacewing larvae and predatory mites, (*Typhlodromus* spp. and *Neoseiulus* spp.), occurs, but is usually insufficient to control severe infestations. Applications of certain products such as Gusathion or Lannate may result in a dramatic increase in numbers of this pest.

2.2.2 Cultural

There are no cultural measures that can be used to control red spider mite.

2.2.3 Plant protection products

The following treatment is registered for the control of red spider mite:

Product	Dosage/100 ℓ water
Meothrin + Elsan	30-60 ml + 100 ml