

BIOSECURITY SA – Plant Health

Exotic Plant Pest Hotline: **1800 084 881** (available 24 hours)

Email: PIRSA.planthealth@sa.gov.au

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BIOSECURITY SA
PIRSA

Citrus red mite

Panonychus citri

Citrus red mite was first recorded in Australia at Oxford Falls, a Sydney suburb in 1966. It has since become established across the Central Coast region of New South Wales. Established areas include near Gosford, the County of Northumberland and Sydney metropolitan homes in the County of Cumberland. Citrus red mite has not been recorded elsewhere in Australia.

Citrus Red Mite Biosecurity Zone

The Citrus Red Mite Biosecurity Zone includes the counties of Cumberland and Northumberland.

Movement of citrus red mite host material out of the Citrus Red Mite Biosecurity Zone is restricted.

The Certification Assurance Scheme [CA -16 Treatment of Citrus, Fortunella or Poncirus for Citrus Red Mite](#) outlines treatment conditions required for the movement of citrus red mite host material out of the Citrus Red Mite Biosecurity Zone.

Spread

Long distance spread of mites can occur on clothes and when infested plant material or equipment is moved.

Citrus red mites are classified in the spider mite family (Tetranychidae). Spider mites are known to walk short distances within and between plants. Local dispersal may be assisted by wind.

Symptoms

The mites feed on leaves, preferring light green, maturing foliage, on green bark and on immature and mature fruit. The scratch-like feeding marks give the leaves and green immature fruit a pale appearance. Injured mature oranges and lemons turn a pale straw yellow. On the Central Coast orange trees are the preferred host. In very light infestations the feeding marks are most commonly at the base of the



Citrus red mite damage to navel orange leaves
Photo courtesy of David Rosen, UC Statewide IPM Program, University of California

upper leaf surfaces. Heavy infestation when trees are under stress from drying conditions such as mild dry winds and low soil moisture leads to defoliation, fruit drop and twig and branch dieback. These dry conditions often occur on the Central Coast in autumn, early winter and spring. Defoliation starts in the tops of trees.

Description

Adult female mites are oval-bodied, plump, up to 0.5 mm long, with 4 pairs of legs. They resemble the bean spider mite, which infests beans, cucumbers and many ornamental plants, but are dark red to purple red and have long bristles on prominent tubercles on the back and sides. Males are smaller, and abruptly narrowed towards the rear. The adult females lay 20 to 30 eggs, at a rate of 2 or 3 per day, placing them on the infested surface, commonly along the



Adult citrus red mite (approx. 0.5 mm)
Photo courtesy of L. Buss, University of Florida, Institute of Food and Agricultural Sciences

midribs of the leaves. The egg is about 0.13 mm in diameter, bright red and nearly spherical. There is a vertical stalk on the top of the egg with 10 or 12 very fine guy threads radiating from the tip of the stalk to the plant surface. Mite larvae, which have 3 pairs of legs, hatch from the eggs in 8 to 30 days. They develop through 2 nymphal stages (with 4 pairs of legs), each lasting several days, then become adults. In summer, a generation from egg to egg may be as short as 3 weeks, and adults may live 18 days. Development continues all through the year, but at a slower rate in cool conditions. Extremely hot dry weather accompanied by wind usually causes high mortality of the mites. Prolonged periods of high humidity are also unfavourable to them.

Host range

Citrus red mite has a wide host range of around 90 different species across 30 plant families.

In New South Wales, citrus red mite is known to infest citrus species. Host citrus species include orange, lemon, mandarin, tangerine and grapefruit.

Murraya (orange jessamine) plants are closely related to citrus and have been recorded as an alternative host to citrus red mite.

**If you see anything unusual, call the
Exotic Plant Pest Hotline**

