

Red Spider Mite (*Tetranychus evansi*)

What are the main hosts?

Red spider mites affect potatoes, eggplant, capsicums and beans, as well as tomatoes.

What do they look like?

Adult female Red spider mites are 0.5 mm long, oval-shaped, orange red coloured with an indistinct dark blotch on each side of the body. They can lay up to 200 eggs. Males are smaller and straw to orange coloured (Fig 1). Their development is favoured by hot dry conditions and their life cycle is completed in 13.5 days.

What should I look for?

Damage is mainly to the leaves of host plants (Fig 2). Feeding punctures created by the mites lead to whitening or yellowing of leaves, followed by desiccation, and eventually defoliation. In cases of severe attack, plants may die. An indication of Red spider mite is the presence of webbing which can be seen on the underside of the leaf, and in severe cases envelops parts of the plant (Fig 3). Its small size makes it difficult to detect and it could easily be confused with other spider mites which may already be present in New Zealand.

Why is it important?

Red spider mites infest the leaves of host plants and results in loss of yield. The pest does not directly affect fruit or produce quality except for heavy infestations. Eradication can be difficult.

How do they spread?

Over short distances, mites can be spread by wind, irrigation water, and on clothing and tools. Mites can disperse within plants by walking. Movement of host plants can cause long distance spread. Its small size and similarity with other spider mite species makes it difficult to detect on consignments. Mites can be spread on the fruit of host plants, including tomatoes "on the vine", on Solanaceae plants, and as a hitchhiker on non-solanaceous plants.

Where are they present?

Red spider mites originate from South America and were accidentally introduced to other parts of the world. It is now present in North and Central America, Caribbean, many parts of Africa, Europe, the Mediterranean, China, Japan, Taiwan, and Australia.

In May 2020, two small populations were detected in New Zealand in the South Auckland area.



Fig 1. Male (top) and female (bottom) Red spider mite. Image: Alain Migeon, CBGP – INRA, Monferrier-sur-Lez, France

How can I protect my industry?

Check your production sites frequently for the presence of new diseases and unusual symptoms. Make sure you are familiar with common pests and diseases of your industry so you can recognise something different.



Fig 2. Red spider mite infested leaf. Image: Alain Migeon, CBGP – INRA, Monferrier-sur-Lez, France.



Fig 3: Red spider mite webbing on a leaf. Image: Alain Migeon, CBGP – INRA, Monferrier-sur-Lez, France.