

Primefact

Peach leaf curl

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Peach leaf curl is a fungal disease caused by *Taphrina deformans* that affects peaches and nectarines. If untreated, it is one of the most serious and common diseases of these crops.

Disease identification

Leaf curl is often seen in the top of the canopy, where spray coverage might not have reached. The infection will appear on younger leaves first; they will be pink-red with the characteristic curling (Figure 1).

Damage

Peach leaf curl is favoured by a cool, wet spring around budswell followed by warm, humid conditions, which bring about rapid growth. The optimum temperature range for fungal growth is between 20 °C and 26 °C. After the initial infection, leaves will curl and become severely distorted. Leaves then tend to turn yellow and fall, causing new tissue to replace fallen leaves. The energy required for this new growth reduces fruit set and weakens trees. Leaf curl can also affect young shoots, which become stunted and distorted, often resulting in the death of the shoot. Infected fruit will have raised, irregularly shaped and rough areas on the skin surface.



Figure 1. Peach leaf curl. Photo: Paul Bachi, University of Kentucky Research and Education Center, Bugwood.org.

Monitoring

Correctly timing protectant sprays in early spring (particularly copper-based fungicides) is vital for controlling the disease. Monitor bud development in late winter to early spring to ensure correct spray timing according to label instructions. Monitor and record the incidence of leaf infection.

Management

Cultural and physical: where leaf curl has been a serious problem, it is important to put more effort into maintaining tree vigour. Thin more fruit than usual, ensure adequate irrigation and apply extra nitrogen fertiliser.

Biological: there are no known biological control agents for peach leaf curl. However,

copper sprays provide effective control and some copper-based fungicides have been approved for use in organic production systems.

Chemical: check the [APVMA PubCRIS database](https://portal.apvma.gov.au/pubcris) for registered controls (<https://portal.apvma.gov.au/pubcris>).

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