

(*Passiflora* spp.)

Passionfruit was the name given to species of the genus *Passiflora* by early Spanish missionaries in South America who saw the story of the crucifixion in the flower structure. The corona represents the crown of thorns; the five anthers represent the five wounds; the three stigmas represent the nails on the cross; the five petals and five sepals represent the ten apostles (excluding Judas and Peter); the tendrils represent the whips and cords and the leaf represents the spear.

The genus *Passiflora* has some 400 species, all but about 5% of which originated in the New World. Only two species are cultivated by industry – *P. edulis* and *P. quadrangularis*. *Passiflora edulis*, which originated in Brazil, has two recognised forms: the purple f. *edulis*, which is better suited to cooler subtropical conditions, and the more tropical yellow f. *flavicarpa*. *Passiflora quadrangularis*, known as the giant granadilla, is a native of tropical South America and grows best in hot, moist climates. Hybrids between f. *edulis* and f. *flavicarpa* were developed for the Australian industry.

Diseases have a serious impact on production as well as on the economic life of a passionfruit plantation. Most plantations have to be replaced after two years due to the effect of viruses.

FUNGI

■ ALTERNATA SPOT

Cause

The fungus *Alternaria alternata*.

Symptoms

On young leaves, small, necrotic spots occur, surrounded by yellow haloes up to 6 mm wide with diffuse margins. On older leaves, dead tissue is surrounded by a yellow or light orange halo. Leaves may fall after developing only a few spots. Small stem lesions rarely kill sections of vine.



Fig 15.1 Symptoms of alternata spot on passionfruit. Note the greasy, water-soaked margins.

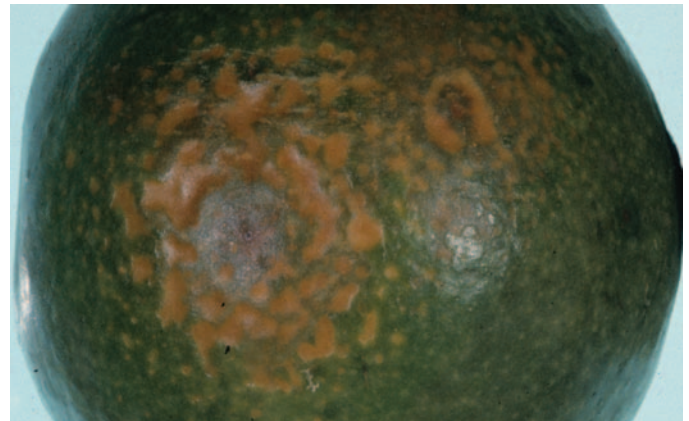


Fig 15.2 Alternata spot developing on fruit damaged by passionvine bug.

Small spots develop on fruit and have a tan or brown centre with a greasy, water-soaked margin. The spots are skin deep, not sunken and usually less than 1 cm wide. In highly susceptible varieties, spots may be up to 3 cm in diameter. A tear-stain effect occasionally develops down the side of the fruit.

Source of infection and spread

Spores are produced on infected leaves and fruit and on the dead blossom attached to the fruit stalk. These are readily