



Bulb scale mite

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Bulb scale mite Steneotarsonemus laticeps was confirmed to be infecting narcissus bulbs in Victoria late in 1987. The pest had not been recorded in Australia before but the extent of the infestations suggested that it had been present for some time and may be widespread throughout Victoria and probably other areas of Australia.

Description

Adult bulb scale mites are extremely small. The female is about 0.2 mm long and pale translucent brown. It has four pairs of legs but the last pair look like long bristles. The male is similar to the female but smaller and the last pair of legs form strong curved claspers. The eggs are oval translucent white and about half the size of the adult female.

Bulb scale mite is easy to distinguish from the more common bulb mites *Rhizoglyphus echinopus*, because bulb mite is large enough to see without a lens, is globular in shape, translucent white and has strong looking legs.

Hosts

Mainly narcissus bulbs of other plants in the family Amaryllidaceae.

Biology and damage

This mite is a major pest of forced narcissus in Britain. The mites feed between the bulb scales and cause brown streaking within the bulbs. Infested bulbs are undersized and go soft when stored. Foliage from infested bulbs is

abnormally bright green and later becomes streaked with yellow and distorted. Damage to flower buds frequently leads to malformed flowers and heavy infestations may kill the buds. Leaves and flower stems may be disfigured by elongated, serrated scars.

Forcing the bulbs leads to an increase in mite numbers and congregation at the neck of the bulb from where leaves and buds are infested.

On *Hippeastrum* the mites cause red streaks and spots on the base of developing leaves and stems.

In the colder parts of the year the mites remain in the bulbs but when the bulbs are brought in for forcing under glass the mites increase rapidly and a life cycle may be completed in about two weeks. There are several generations per year.

The mites can spread by travelling along leaves or over the ground. Infested bulbs in storage can lead to contamination of other bulbs.

Control

Hot water treatment of dormant bulbs is effective. Immersion for four hours at 43.3 degrees C or three hours at 44.4 degrees C is required. Treatment should be repeated every two years and bulbs should be grown in the open for at least one year before being used for forcing.

There are various treatments recommended overseas but there are no chemical treatments registered for control of bulb scale mite in Victoria.

For effective pest and disease control, correct diagnosis is essential. A commercial diagnostic service is available at the Institute for Horticultural Development. For further information, contact the Diagnostic Service. ph: (03) 9210-9222 or fax (03) 9800 3521.

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