

Mini data sheet on *Pseudacysta perseae* (Hemiptera: Tingidae)
Avocado lace bug

Added to the EPPO Alert List in 2015 - Deleted in 2018

Reasons for deletion:

Pseudacysta perseae has been included in EPPO Alert List for more than 3 years and during this period no particular international action was requested by the EPPO member countries. In 2018-06, the Working Party on Phytosanitary Regulations agreed that it could be deleted, considering that sufficient alert has been given.

Why: The presence of the avocado lace bug, *Pseudacysta perseae*, was first reported in 2014 on the island of Madeira (Portugal). Until the 1990s, *P. perseae* was considered to be a minor pest of avocado and its geographical distribution was limited to Florida (US) and Mexico. However, during the last 10 years, *P. perseae* has spread within the USA and around the Caribbean Basin, and severe damage to avocado crops has been reported in some of the newly invaded areas. As *P. perseae* might present a threat to the avocado production in the Euro-Mediterranean region, the EPPO Secretariat has decided to add it on the EPPO Alert List.

Where: since the 1990s, *P. perseae* has been spreading in the Americas, showing an invasive behaviour. Its presence was first noticed on the Island of Madeira (PT) in 2014.

EPPO region: Portugal (Madeira only).

North America: Mexico, USA (California, Florida, Georgia, Louisiana, Texas).

Central America and the Caribbean: Bermuda, Cuba, Dominican Republic, Guadeloupe, Guatemala, Jamaica, Martinique, Puerto Rico, Saint Kitts and Nevis, Saint Lucia, Trinidad and Tobago, Virgin Islands (US).

South America: French Guiana, Venezuela.

On which plants: the main cultivated host plant is avocado (*Persea americana*), but *P. borbonica* and *Cinnamomum camphora* (all Lauraceae) are also recorded as hosts.

Damage: Adults and nymphs feed in colonies on the undersides of leaves. On avocado, feeding damage results in necrotic brown spots which can lead to defoliation and reduced fruit yield (but no direct damage to fruit is reported). Highly infested trees present a scorched leaf appearance. Where a colony of *P. perseae* is present, the lower surface of the leaves is more or less thickly covered by a dark, sticky secretion from the insects. In newly invaded areas, severe defoliation and reduced yield have been reported in commercial avocado orchards. Experimental evidence has shown that avocado cultivars vary in their susceptibility to feeding damage. The 'Hass' avocado which is widely grown, is susceptible to the insect (e.g. severe outbreaks have been observed on this crop in the Dominican Republic). On trees which are planted for amenity purposes in urban areas, the presence of *P. perseae* can disfigure trees. In the USA, it is considered to be a potential threat to ornamental plantations in urban areas.

Dissemination: no information is available on the potential of *P. perseae* for natural spread (adults can fly and be transported by wind). Over long distances, human activities (agricultural trade, transport) probably play a key role in the insect spread. As the insect does not feed on fruit, avocado fruit are not likely to be a pathway.

Pathway: Plants for planting of avocado and other hosts from countries where *P. perseae* occurs, hitchhiking?

Possible risks: Avocado is not widely grown in the EPPO region but is of economic importance at least in Israel and Spain. Studies would be needed to evaluate the potential of establishment of *P. perseae* in the EPPO region, as for the moment the pest is mostly reported from sub-tropical countries. In addition, damage is mainly reported from subtropical countries and apparently not from areas with a more Mediterranean-type of climate such as California. Chemical control methods are available and

biological control agents (e.g. the predators *Frankliniella vespiformis*, *Chrysoperla rufilabris*) might also have an impact on pest populations. However, as integrated pest management is conducted in many avocado orchards, the introduction of any new pest is likely to pose problems. As for the moment, *P. perseae* has only been found in Madeira, it seems desirable to avoid its further spread within the EPPO region.

Sources

INTERNET

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