

Mini data sheet on *Homalodisca coagulata*

Homalodisca coagulata was added to the EPPO A1 List in 2006. A full datasheet will be prepared, in the meantime you can view here the data which was previously available from the EPPO Alert List (added to the EPPO Alert List in 2002-deleted in 2006).

Homalodisca coagulata (Homoptera: Cicadellidae) - Vector of *Xylella fastidiosa*

Why: In California (US), the recent establishment of *Homalodisca coagulata* (glassy-winged sharpshooter) resulted in an increase of incidence of grapevine Pierce's disease (caused by *Xylella fastidiosa*) and is perceived as a threat to the whole Californian grapevine industry and also to other plants such as alfalfa, almond, peach, plum and oleander. As *H. coagulata* seems to present a greater risk to the EPPO region than the listed vectors of *X. fastidiosa*, with respect to both grapevine and citrus, the EPPO Panel on Phytosanitary Measures felt that it should be added to the EPPO Alert List.

Where: Mexico (north, except in very arid areas), USA (southern states: Alabama, Arizona, Arkansas, Florida, Louisiana, Mississippi, North Carolina, South Carolina, Texas). Recently established in southern California but it is expected that it will continue to spread towards the north. *H. coagulata* is thought to have been introduced from other parts of USA, most probably as egg masses on plant material. Since the early 1990s, *H. coagulata* has been seen in high numbers in citrus groves along the coast of southern California but until 1994 it was confused with a similar species *Homalodisca lacerta*. Introduced into Tahiti, French Polynesia.

On which plants: It has a very broad host range. It has been found on more than 70 plant species in 35 families including: avocado, citrus, macadamia, and many woody ornamentals (e.g. *Fraxinus*, *Lagerstroemia*, *Rhus*). A list of host plants can be viewed on Internet (California Department of Food and Agriculture).

Damage: Adults are 13-14 mm long, dark brown with small yellow dots on head and thorax. Membranous, translucent wings with reddish veins. Insects overwinter as adults and begin laying egg masses (10-12 eggs) in late February through May. Adults of this first generation appear in late May through late August. Second-generation egg masses are laid from mid-June through late September. *H. coagulata* feeds on stems rather than leaves, and excretes copious amounts of watery excrement.

In California, *H. coagulata* is an efficient vector of *X. fastidiosa* to grapevine, almond, and oleander. In southeastern USA, *H. coagulata* is considered as the most efficient vector of peach phony and plum leaf scald. The strain of *X. fastidiosa* causing citrus variegated chlorosis does not occur in California. While *H. coagulata* is not positively mentioned as a vector of this strain, it occurs abundantly on citrus and seems likely to facilitate spread of the citrus disease if it were ever introduced into California. Following the establishment of *H. coagulata* in California, an outbreak of grapevine Pierce's disease occurred in the Temecula Valley of Southern California. The outbreak started in 1997. In 1998, symptoms were visible in a few localized areas but when tests were done they revealed a disease incidence of 25% to 97% in vineyards. It is estimated that during the last 3 growing seasons, the disease has killed more than 120 ha of vineyards in the Temecula Valley and that it threatens the whole Californian grapevine industry. Phytosanitary measures are being taken in California to prevent the spread of *H. coagulata*.

Pathway: *H. coagulata* could be introduced via its many host plants into the EPPO region. Plants for plantings, cut flowers and branches, fruits?

Possible risks: *X. fastidiosa* does not occur in Europe but it represents a very serious threat essentially to grapevine and citrus crops, but also to other host plants such as deciduous

forest and amenity trees and oleander. Measures are already taken to prevent the entry of *X. fastidiosa* but it is also very important to prevent the entry of efficient vectors such as *H. coagulata*.

Sources

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- University of California. Agriculture and Natural Resources. Report of the Pierce's Disease research and emergency response task force. <http://danr.ucop.edu/news/speeches/glassywinged.html>
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