

Mini data sheet on *Chionaspis pinifoliae*

Chionaspis pinifoliae was added to the EPPO A1 List in 2022. 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 2020 - deleted in 2022).

Chionaspis pinifoliae (Hemiptera: Diaspididae - pine leaf scale)

Why: *Chionaspis pinifoliae* was recently identified as a potential threat to Nordic coniferous forests when screening for potential pests associated with trade of ornamental plants, and the Nordic PRA Network has proposed its addition to the EPPO Alert List. The pest was assessed to potentially fulfil the criteria to become regulated as a quarantine pest in the European Union territory and Norway. In addition, the EPPO Panel on Quarantine Pests for Forestry also supported the addition of *C. pinifoliae* to EPPO Alert List in March 2020.

Where: *C. pinifoliae* is assumed to be native to North America and it has been introduced in a few countries in Central America and the Caribbean. In the literature, there are unconfirmed records of the pest from Germany and the United Kingdom (it can be noted that in the UK Plant Health Risk Register, *C. pinifoliae* is considered absent from the UK).

EPPO region: Absent.

North America: Canada (Alberta, British Columbia, Manitoba, New Brunswick, Nova Scotia, Ontario, Prince Edward Island, Québec, Saskatchewan), Mexico, USA (Alabama, Arizona, California, Colorado, Connecticut, District of Columbia, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming).

Central America and the Caribbean: Cuba.

On which plants: *C. pinifoliae* is a pest of conifers with known hosts in the genera *Pinus* (main host genus), *Abies*, *Cedrus*, *Cupressus*, *Juniperus*, *Picea*, *Pseudotsuga*, *Taxus*, *Torreya* and *Tsuga*.

Damage: *C. pinifoliae* feeds by sucking the sap from the needles, which causes the foliage to turn yellow and drop. During heavy infestations the lower branches of the tree usually die first and eventually the whole tree may be killed.

Picture of *C. pinifoliae* can be viewed on the Internet:

<https://www.forestryimages.org/browse/subthumb.cfm?sub=297>

Dissemination: The first instar (crawler) of *C. pinifoliae* is mobile and may walk a few metres to a new host tree. Over longer distances, *C. pinifoliae* may be dispersed by wind and animal vectors. All stages of the pest may be transported over longer distances on infested plant material. It can be noted that pest has been intercepted on imported pine trees on several occasions in Bermuda.

Pathways: Plants for planting, cut branches and bark from areas where *C. pinifoliae* occurs.

Possible risks: Host plants of *C. pinifoliae* are widely planted and cultivated across the EPPO region. *C. pinifoliae* is considered a common pest of conifers in its native area, but damage seems to usually be limited to nurseries, Christmas tree plantations and ornamental conifer

trees. *C. pinifoliae* is considered to be a serious pest of ornamental pine trees in USA, especially on *Pinus mugo* and *Pinus sylvestris*, and heavy outbreaks have been recorded after widespread spraying against mosquitoes, which presumably eliminated the natural enemies. Thus, natural antagonists are considered important in controlling *C. pinifoliae* in its native range. If natural antagonists are lacking in the EPPO region, the pest could potentially build up large populations and heavy outbreaks might lead to severe economic and environmental impacts in nurseries, ornamental and Christmas tree plantations, as well as in natural and planted forests.

C. pinifoliae can be associated with coniferous nursery plants and it is uncertain whether the current phytosanitary measures would prevent its introduction into the EPPO region. For example, plants for planting of two of its known host genera, *Cupressus* and *Torreya*, can be imported to the European Union territory according to the current EU plant health legislation. Finally, the pest is established in climate types that are widely distributed in the EPPO region suggesting that it has a potential to establish throughout the EPPO region.

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INTERNET

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