

Mini data sheet on *Leptocybe invasa*

Added in 2006 - Deleted in 2010

Reasons for deletion:

Leptocybe invasa 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 2010, it was therefore considered that sufficient alert has been given and the pest was deleted from the Alert List.

Leptocybe invasa (Hymenoptera: Eulophidae - Blue gum chalcid)

Why	<i>Leptocybe invasa</i> is a newly described species which is currently spreading in many countries around the Mediterranean Basin and in Africa, causing damage to eucalyptus young plantations and nurseries.
Where	<p>EPPO region: Algeria, France (including Corsica), Israel, Italy, Jordan, Morocco, Portugal, Spain, Turkey.</p> <p>Africa: Algeria, Jordan, Kenya, Morocco, Syria, Tanzania, Uganda.</p> <p>Asia: Iran, Israel, Thailand, Turkey, Vietnam.</p> <p>North America: USA (Florida, detected in 2008 in Broward county).</p> <p>Oceania: <i>L. invasa</i> is thought to originate from Australia, but its situation in this country is unknown.</p>
On which plants	<i>L. invasa</i> attacks many <i>Eucalyptus</i> species (e.g. <i>E. botryoides</i> , <i>E. bridgesiana</i> , <i>E. camaldulensis</i> , <i>E. globulus</i> , <i>E. gunii</i> , <i>E. grandis</i> , <i>E. saligna</i> , <i>E. maidenii</i> , <i>E. robusta</i> , <i>E. tereticornis</i> , <i>E. viminalis</i>).
Damage	<i>L. invasa</i> causes galls on the mid-ribs, petioles and stems of new shoots of eucalyptus trees. Heavy infestations can lead to deformed leaves and shoots, and a growth reduction of the tree. Serious damage to young plantations and nursery seedlings has been reported but tree mortality has apparently not been observed. Adult females (1.1-1.4 mm) insert their eggs in the epidermis of young leaves, on both sides of the mid-rib, in the petioles and in the parenchyma of twigs. Larvae develop inside round galls (about 2.7 mm wide), adults then emerge leaving round exit holes. So far, only females have been observed (reproducing by parthenogenesis), with the exception of one record describing males in Turkey. In Iran, Israel and Turkey, two to three overlapping generations per year have been observed.
Dissemination	Adult can fly but no data is available on natural spread of this insect. Trade of plants for planting can move the pest over long distances.
Pathway	Plants for planting of eucalyptus, cut foliage?
Possible risks	Eucalyptus are widely grown around the Mediterranean Basin for forestry and ornamental purposes. Currently, no control measures are available against <i>L. invasa</i> , although research is being carried out to identify potential natural enemies. Chemical control may be available in nurseries but will be more difficult in natural environments. Much data is lacking on the taxonomy, current geographical distribution, biology, and economic impact. It is felt that many species attacking eucalyptus foliage are being moved with trade, therefore more precautions would be needed when exchanging eucalyptus plants for planting.
Source(s)	<p>Almatni W, Mayhoob M (2005) Eucalyptus gall-wasp <i>Leptocybe invasa</i> Fisher & La Salle (Eulophidae, Hymenoptera), a new insect in the Mediterranean region and Syria. <i>Arab and Near East Plant Protection Newsletter</i>, FAO, no. 40, p 38.</p> <p>Aytar F (2007) Description, distribution and hosts of <i>Blastopsylla occidentalis</i> (Homoptera: Psyllidae), a new pest of <i>Eucalyptus</i> spp. in Turkey. Poster presented at the 2nd Plant Protection Congress of Turkey, Isparta (TR), 2007-08-27/29.</p> <p>Aytar F (2006) Natural history, distribution and hosts of <i>Eucalyptus</i> gall wasps in Turkey. Poster presented at the VIIIth European Congress of Entomology, Izmir (TR), 2006-09-17/22. http://www.geocities.com/fatihaytar/publ/2006/L_invasa_and_O_maskelli.pdf</p> <p>Branco M, Franco JC, Valente C, Mendel Z (2006) Survey of <i>Eucalyptus</i> gall wasps in Portugal. <i>Boletín de Sanidad Vegetal - Plagas</i> 32(2), 199-202.</p> <p>Hesami S, Alemansoor H, Seyedebrahimi S (2005) Report of <i>Leptocybe invasa</i> (Hym.: Eulophidae), gall wasp of <i>Eucalyptus camaldulensis</i> with notes on biology in Shiraz vicinity. <i>Journal of Entomological Society of Iran</i> 24(2), 99-108 (abst.).</p>

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EPPO RS 2006/190, 2007/012, 2007/013, 2007/151, 2009/142

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