

Spread status of *Corythucha arcuata* (Heteroptera, Tingidae) in Romania

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Abstract

Corythucha arcuata (Say, 1832), commonly named the Oak lace bug (OLB), is an insect that belongs to the order Heteroptera, family Tingidae, native to North America. The allogeneic species is known to be invasive and its presence was first reported on the European continent in May 2000, in the region of Lombardy, Italy (Bernardinelli and Zandigiacomo, 2000), then reached Turkey (Mutun, 2003) and spread further in most southern European countries: Bulgaria (Dobrevă et al., 2013), Croatia (Hrašovec et al., 2013), Hungary (Csóka et al., 2013), Slovenia (Jurc and Jurc, 2017), Slovakia (Zubrik et al., 2019), progressing very rapidly and affecting very large areas of *Quercus* forests. Also, the species was detected for the first time in the southern Romania in 2016 (Chireceanu et al., 2017), and after a relatively short period, the presence of the insect was reported in several areas of Romania.

The aim of the research was to evaluate the current spread status and level of infestation of the species. We used direct observation method and evaluation of leaves in situ. We also used drone photography as a technique for large areas evaluation. The field work was carried out in the vegetative periods of 2020 and 2021. We made over 50 observations in *Quercus* forests and our results shows that the species was detected in over 50% of the survey points, some of the areas being highly infested.

Keywords: biodiversity, conservation, invasive species

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