

MORPHOLOGICAL AND BIOLOGICAL DIFFERENCES BETWEEN TWO INVASIVE SPECIES *CORYTHUCHA CILIATA* SAY AND *CORYTHUCHA ARCUATA* SAY (HEMIPTERA, TINGIDAE)

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Abstract

The research aimed the study of two controversial species in Romania, *Corythucha ciliata* Say (sycamore tiger or sycamore lace bug) and *Corythucha arcuata* Say (oak tiger or oak lace bug) (Hemiptera, Tingidae). Knowing and differentiating the two species is important in order to observe their behavior, the way of damage, but also to be able to find methods to reduce the frequency of attack on plane trees and oak trees. Both insects are aggressive pests, damaging the leaves of trees and leading to their premature defoliation. The research aimed to identify, monitor and differentiate the two species from a morphological and biological point of view. The two species were observed and monitored over two years, 2020-2022, being identified in several locations in Transylvania, on plane (*Platanus* spp.) and oak (*Quercus robur* Linné). Regarding the biological cycle, in the temperate-continental climate of Cluj-Napoca, *Corythucha ciliata* Say develops two generations per year, while *Corythucha arcuata* Say develops three generations per year. The main criterion for differentiating the two species is the color of the ribs and the specific pattern on their wings.

Key words: invasive species, lace bugs, morphological differentiation, biological cycle, monitoring