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Cyclosa conica (ARANEAE: ARANEIDAE) - A POTENTIAL PREDATOR OF *Corythucha arcuata* (HETEROPTERA: TINGIDAE)

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Forests play an enormous role for Earths' biota, being "lungs" of the planet and having many other functions. These ecosystems cover around 4.14 billion hectares globally, of which insect pests damage 35 million hectares of forests each year. Some of the pests fall into invasive organisms' category. Invasive species are the organisms that penetrate into territories that are not specific for their initial distribution area and cause damage to local flora and fauna. For example, the oak lace bug (OLB) *Corythucha arcuata* (Say, 1832) (Heteroptera: Tingidae) is an invasive species from the eastern USA. It sucks oak leaves' sap. As a consequence, leaves are losing much of its photosynthetic potential. It firstly appeared in Europe in Italy (Milan) and then rapidly spread throughout all of the European continent. Apart from the chemical treatments of the forests, the sole species of the Mymaridae wasps that control firmly *C. arcuata* was detected. On the other hand, spiders are important predators of many pests in nature. One of these species of the orb weaver spiders is *Cyclosa conica* Pallas, 1772 (Araneae: Araneidae). It usually makes a vertical stripe (stabilimentum) in its webs. The stripe is made out of exuviae of the consumed insects and other debris. The goal of this paper is to bring an example of the new potential preying of the *C. conica* spider on *C. arcuata* bug. On the 23.09.2024 in a plum plantation (N 46°97'03", E 28°.88'87") of the Institute of Genetics, Physiology and Plant Protection (Chișinău, Republic of Moldova) was observed a web of *C. conica* with a male of *C. arcuata* in it. The exemplars of both the spider and the bug were keyed till the level of species. We haven't found any traces of preying the spider on this bug. Some data suggest that bugs are rarely accepted by spiders as prey. Besides, adults of *C. arcuata*, probably, got occasionally in the web of this spider. Nevertheless, we should underline that even immobilized adults of *C. arcuata* in spiders' webs can serve as a material for stabilimentum. The technical role of this stripe is a subject of discussion. One of the several opinions

is that it stabilizes the structure of the web, another – that it enables spider remain unobservable for potential predators when *C. conica* hides between debris. Stabilimentum can, also, play a misleading role when potential predators attack the debris meanwhile spider running and escaping. The spider can indirectly contribute to controlling OLB in both forest and agricultural ecosystems. In conclusion, we must summarize that even small generalist orb weaving spiders can contribute to controlling the severe invasive bug species *C. arcuata* and can serve as one of those species that use OLB in its life activity.

Keywords: *Cyclosa conica,* predator, oak lace bug, *Corythucha arcuata*.

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