

ASSESSMENT OF THE DAMAGE TO LEAF BLADES BY *PARECTOPA ROBINIELLA* LARVAE IN THE BREST REGION

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Introduction. Many alien species are characterized by plasticity that allows them to be introduced into new ecosystems. The high rate of reproduction makes it possible to increase the number quickly and occupy the territory, many of the alien species have increased competitiveness, leading to the suppression or displacement of native species (Semenchenko & Pugachevsky, 2006). Some of the dangerous invasive insects in Europe are representatives of the Gracillariidae family. Among the representatives of this family, *Parectopa robiniella* is actively exploring new territories.

This phytophage poses a threat to black locusts in green areas because outbreaks of mass reproduction can lead to a significant loss of decorative effect by plants (Gninenko & Rakov, 2011). Today, the species is listed in the Black Book of invasive animal species of Belarus (category: A2) (Semenchenko et al., 2020).

Material and Methods. The research was carried out in the Brest region in 2015–2020. The assessment of the population of *P. robiniella* larvae on the lower crown of plants (the percentage of damaged leaf blades among 100 randomly selected) was carried out. Damaged leaf blades of *Robinia* sp. were herbarized and then scanned using the Epson Perfection 4180 Photo (300 dpi resolution). The ImageJ program was used to determine the areas of *Robinia* leaves damaged by *P. robiniella* larvae.

Results. As a result of the studies, regional features of the population of the lower crown of plants (3–71 %) and the relative damage (no more than 5 %) of the leaf blades of *Robinia pseudoacacia* L. by the larvae of an invasive miner in the green stands of the Brest region were noted. It has been established that autumn foliage harvesting can significantly reduce the pest density in green stands. Among forage plants, *Robinia hispida* L. is the most inclined to damage by phytophagous larvae.

Conclusion. In green plantings, *P. robiniella* is classified as a phytophagous pest with an average level of harmfulness. However, in some years there have been outbreaks of mass reproduction of *P. robiniella*, which leads to early defoliation of black locusts.

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References

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