

Popularising issues related to knowledge of alien and invasive Coleoptera in Romanian fauna

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Insects, a large and diverse group of terrestrial animals, are also an important source of invasive alien species. Scientific and public interest in invasive alien species is mainly driven by their socio-economic impact, resulting mainly from unintentional introductions in international agricultural, horticultural, and forestry trade. In Romania, 60 species of alien and invasive or potentially invasive Coleoptera have been reported: 52 species of alien and invasive or potentially invasive beetles reported in the first national list after the application of Regulation (EU) 1143 (2014). In addition to the species on the list, *Leptinotarsa decemlineata* SAY, 1824, *Diabrotica virgifera virgifera* LECONTE, 1868 and *Ips duplicatus* SAHLBERG, 1836 have been reported. A further five species are added in our latest contribution, *Cis chinensis* LAWRENCE, 1991 (Ciidae), *Latheticus oryzae* C.O. WATERHOUSE, 1880, *Palorus subdepressus* (WOLLASTON, 1864), *Tribolium destructor* UYTENBOOGAART, 1933, and *Litargus balteatus* LECONTE, 1856, which also includes occurrence data for 19 other species with deficient distribution found in unintentional collections. Subsequently, we developed a collection methodology, which was implemented between April and September 2024 in Constanța, Agigea, Valu lui Traian and Murfatlar, to facilitate the early detection and assessment of the biodiversity of alien coleopteran communities introduced in the port area of Romania, and the results of this collection will be published.

At the national level, access to scientific information on invasive species and their risk analysis is still limited, which automatically leads to a lower level of public awareness. Citizen-scientist interaction and data generation are recognised as having great potential to contribute to biodiversity research due to the number of species observations that can be collected by the public. However, data uploaded to the various platforms or social media groups dedicated to biodiversity, and more specifically to invasive alien species, are lost due to a lack of connectivity, fragmentation, or lack of centralisation. Even unintentional collections appear to be essential for finding these species, yet until systematic collection methods or other mechanisms are applied to improve national surveillance strategies. In addition, there is a need to intensify actions to involve local communities in the detection and monitoring of these alien insects, because citizen science is an essential partnership for invasive alien species management and research, and also to centralise data on the dedicated platforms for these species which that can bypass the main detection systems.

Received: 31.05.2025
Accepted: 15.06.2025
Published online: 30.09.2025
Article number: ER29202509
doi: 10.24193/entomolrom.29.9