FOLIA ENTOMOLOGICA HUNGARICA
ROVARTANI KÖZLEMÉNYEK
Volume 87 2026 pp. 117–120
ISSN 0373-9465 (print) ISSN 2786-2798 (online)
published: 21 October 2026

First records of *Epitrix hirtipennis* (Melsheimer, 1847) in the Carpathian Basin (Coleoptera: Chrysomelidae)

Márk Lukátsi[1]* & Dávid Horváth[2]

[1] *H-1223 Budapest, Kamaraerdei út 8, Hungary. E-mail: lukatsi88@gmail.com*
[2] *Széchenyi István University, Albert Kázmér Faculty of Agricultural and Food Sciences, H-9200 Mosonmagyaróvár, Vár tér 2, Hungary. E-mail: horvathdow@gmail.com*

Abstract – *Epitrix hirtipennis* (Melsheimer, 1847) (Coleoptera: Chrysomelidae: Galerucinae: Alticitae), a leaf beetle native to North America, is recorded for the first time from Austria, Czechia, Slovakia, and Ukraine.

Key words – tobacco flea beetle, alien species, tobacco pest, distribution

INTRODUCTION

Epitrix hirtipennis (Melsheimer, 1847), the tobacco flea beetle, is native to North and Central America. In Europe it was first recorded in 1984 from Southern Italy (Sannino *et al.* 1985). Subsequently it has spread across Southern Europe, reaching Spain in the West, and Turkey, Syria and Southern Russia (Krasnodar Krai) in the East (Bieńkowski & Orlova-Bienkowskaja 2016). In 2015 it was detected in Slovenia (Seljak 2017), in 2022 in Hungary (Lukátsi *et al.* 2022), and in 2024 in Romania and Serbia (Lukátsi & Farina 2026).

MATERIAL AND METHODS

Epitrix hirtipennis is a well-known pest of several cultivated species of Solanaceae, especially tobacco (*Nicotiana* spp.). In Hungary, Romania, and Serbia it has been recently observed feeding on *Datura stramonium* L., a wild species of Solanaceae (Lukátsi & Farina 2026). Inspired by these observations and the growing number of records from across Hungary, we conducted field research in potential habitats of the Carpathian Basin in the lowland areas of Austria, Czechia, Slovakia, and Ukraine. Our method was to locate *Datura*

* Corresponding author.

DOI: *https://doi.org/10.17112/FoliaEntHung.2026.87.117*

stramonium plants along roadsides and on agricultural fields and to inspect them for *E. hirtipennis* adults.

The studied specimens are housed in the Coleoptera Collection of the Hungarian National Museum Public Collection Centre – Hungarian Natural History Museum, Budapest, Hungary (HNHM), National History Museum Vienna, Austria (NHMV), Slovak National Museum – Natural History Museum, Bratislava, Slovakia (SNM), National Museum – Natural History Museum, Prague, Czechia (NM), National Museum of Natural History of the National Academy of Sciences of Ukraine, Kyiv, Ukraine (NMU), and in the private collections of the authors, namely in the collection of Dávid Horváth, Vajta, Hungary (CHD), and in the collection of Márk Lukátsi, Budapest, Hungary (CLM).

RESULTS

Material examined – **Austria**: Burgenland State, Siegendorf, roadside, 47.7749°N, 16.5273°E, hand-collected from *Datura stramonium*, 4.VIII.2026, leg. M. Lukátsi (2 CLM, 2 HNHM, 4 NHMV); Burgenland State, Deutschkreutz, roadside, 47.6144°N, 16.6265°E, 7.VIII.2026, leg. M. Lukátsi (2 CLM, 2 HNHM, 3 NHMV). **Czechia**: Jihomoravský District, Sudoměřice, 48.8787°N, 17.2183°E, from *Datura stramonium*, 25.VII.2026, leg. D. Horváth (2 CHD, 2 CLM, 2 HNHM, 4 NM). **Hungary**: Baranya County, Pécsvárad, Arany-hegy, 46.1505°N, 18.3935°E, hand-collected from *Datura stramonium*, 14.VI.2025, leg. D. Horváth, M. Lukátsi et al. (2 CLM); Borsod-Abaúj-Zemplén County, Mezőkövesd, Lövő-út-M3 highway, 47.7812°N, 20.5829°E, hand-collected from *Datura stramonium*, 23.VIII.2025, leg. M. Lukátsi (1 CLM); Győr-Moson-Sopron County, Hegykő, roadside, 47.6182°N, 16.8093°E, hand-collected from *Datura stramonium*, 8.VIII.2026, leg. M. Lukátsi (3 CLM); Heves County, Kerekharaszt, 47.6744°N, 19.6240°E, hand-collected from *Datura stramonium*, 16.VIII.2025, leg. M. Lukátsi (1 CLM). **Slovakia**: Trnavský District, Jahodná, edge of maize field, 48.0615°N, 17.7090°E, from *Datura stramonium*, 25.VII.2026, leg. D. Horváth (2 CHD, 2 CLM, 2 HNHM, 3 SNM); Trnavský District, Veľký Meder, edge of maize field, 47.8675°N, 17.7847°E, from *Datura stramonium*, 25.VII.2026, leg. D. Horváth (2 CHD, 2 CLM, 2 HNHM, 8 SNM). **Ukraine**: Zakarpattia Oblast, Stare Davydkovo, roadside near tobacco plantation, 48.4592°N, 22.6477°E, from *Datura stramonium*, 5.VII.2026, leg. D. Horváth & M. Lukátsi (1 CLM, 1 HNHM, 2 NMU).

Remarks – First records from Austria, Czechia, Slovakia, and Ukraine are presented here. In Hungary it is now widespread and common on *Datura stramonium*.

DISCUSSION

Since its first confirmed record in Europe from Italy, *E. hirtipennis* has quickly spread across Southern Europe towards the East and West (Bieńkowski & Orlova-Bienkowskaja 2016). Its spread towards the North followed after a considerable delay; it was recorded from Slovenia in 2015, and from Hungary in 2022 (Seljak 2017, Lukátsi *et al.* 2022). A distribution model based on the then available distribution data predicted that *E. hirtipennis* could probably establish in the lowlands of Austria, Czechia, Slovakia, and Ukraine (Stenberg *et al.* 2019). The current records verify this model and expand the known range of *E. hirtipennis* further to the North. The same model predicted that further spread to hilly and mountainous areas of these countries is unlikely.

In Europe *E. hirtipennis* was reported as a pest of tobacco, eggplant (*Solanum melongena* L.) and potato (*Solanum tuberosum* L.); all of them belonging to Solanaceae. Tobacco growing is not significant in the countries from where the first records are presented here. In Ukraine it was found near a small-scale tobacco plantation, but tobacco plants could not be inspected in lack of permit from the landowner. Further research is needed to assess its significance as a pest of other plant species in Central Europe.

*

REFERENCES

Bieńkowski A. O. & Orlova-Bienkowskaja M. J. 2016: Key to Holarctic species of Epitrix flea beetles (Coleoptera: Chrysomelidae: Galerucinae: Alticini) with review of their distribution, host plants and history of invasions. – *Zootaxa* **4175**(5): 401–435. http://doi.org/10.11646/zootaxa.4175.5.1

Lukátsi M. & Farina L. 2026: Notes on some rare flea beetles of the Carpathian Basin (Coleoptera: Chrysomelidae). – *Folia entomologica hungarica* **87**: 41–56. https://doi.org/10.17112/FoliaEntHung.2026.87.41

Lukátsi M., Horváth D. & Tóth N. 2022: First record of Epitrix hirtipennis in Hungary (Coleoptera: Chrysomelidae). – *Folia entomologica hungarica* **83**: 45–51. https://doi.org/10.17112/FoliaEntHung.2022.83.45

Sannino L., Balbiani A. & Biondi M. 1985: Epithrix hirtipennis (Melsheimer, 1847): Considerazioni tassonomiche, ecologiche ed etologiche. [Taxonomical, ecological and ethological findings concerning Epithrix hirtipennis (Melsheimer, 1847).] – In: Anonymous (ed.): *Atti XIV Congresso Nazionale Italiano di Entomologia, Palermo, Erice, Bagheria.* [*Proceedings of the XIV Italian National Congress of Entomology, Palermo, Erice, Bagheria.*] Accademia Nazionale Italiana di Entomologia, Palermo, pp. 285–292.

Seljak G. 2017: New alien phytophagous insect species to the fauna of Slovenia. – *Acta Entomologica Slovenica* **25**(2): 141–158.

Stenberg J. A., Flø D., Kirkendall L., Krokene P., Alsanius B., Magnusson C., Nicolaisen M., Thomsen I. M., Wright S. A. I. & Rafoss T. 2019: *Pest risk assessment of selected Epitrix species. Opinion of the Panel on Plant Health. VKM report 2019: 17.* – Norwegian Scientific Committee for Food and Environment (VKM), Oslo, 111 pp.