
FAUNISTIC RECORDS FROM THE CZECH REPUBLIC – 573

Coleoptera: Curculionidae: Brachycerinae, Entiminae, Lixinae, Molytinae

Filip TRNKA¹⁾, Petr BOŽA²⁾, Tomáš DOLEŽAL³⁾, Jiří FLANDERKA⁴⁾, Petr JANSÁ⁵⁾, Jiří KRÁTKÝ⁶⁾, Václav KŘIVAN⁷⁾, †Miroslav MIKÁT, Jiří STANOVSKÝ⁸⁾ & Robert STEJSKAL⁹⁾

¹⁾ Tršice 370, CZ-783 57 Tršice, Czech Republic; e-mail: filip.trnka88@gmail.com

²⁾ Jeremiášova 10, CZ-779 00 Olomouc-Povel, Czech Republic;
e-mail: Boza.Petr@seznam.cz

³⁾ Načeradec 83, CZ-257 08 Načeradec, Czech Republic; e-mail: donacia@centrum.cz

⁴⁾ Poděbradova 2952/62, CZ-702 00 Ostrava, Czech Republic; e-mail: flandis@email.cz

⁵⁾ Vinohrady 97, CZ-277 42 Obříství, Czech Republic; e-mail: dendrolog.petr@centrum.cz

⁶⁾ Třebechovická 821, CZ-500 03 Hradec Králové, Czech Republic;
e-mail: macshort@tiscali.cz

⁷⁾ Štěměchy 68, CZ-675 27 Předín, Czech Republic; e-mail: vaclav.krivan@chaloupky.cz

⁸⁾ Na Výspě 651/18, CZ-704 00 Ostrava-Výškovice, Czech Republic;
e-mail: stanovsky.j@seznam.cz

⁹⁾ Riegrova 49, CZ-669 02 Znojmo, Czech Republic; e-mail: rstejskal@centrum.cz

Brachycerinae

Stenopelmus rufinusus Gyllenhal, 1835. Moravia bor.: Ostrava-Poruba, Ludvíka Poděš-tě street (6174), 49°50'51"N, 18°09'28"E, 9.vii.2024, 19 spec., at UV light on the balcony, P. Boža leg., det. et coll.; Děhylov, Štěpán Nature Reserve (6175), 49°51'49"N, 18°11'24"E, 9.vii.2024, 20 spec. (Fig. 1), all specimens were found on *Azolla filiculoides* in pools and a ditch on a wetland meadow, F. Trnka leg., det. et coll.; 11.vii.2024, 25 spec., at UV light, F. Trnka leg., det. et coll.; Ostrava-Výškovice, Na Výspě street (6275), 49°46'59"N, 18°13'6"E, 10.vii.2024, 1 spec., at UV light on the balcony, J. Stanovský leg., det. et coll.

The native range includes the southern and western USA (O'Brien & Anderson 1996). The weevil was first recorded in Europe in France at the end of the 19th century, from where it was mistakenly described by Bedel (Bedel 1902) as *Degorsia champenoisi* Bedel, 1902. It was subsequently recorded in other countries during the 20th and 21st centuries, such as Great Britain (Janson 1921), Germany (Manzek 1927), Hungary (Podlussány 2001), Spain (Fernández Carillo et al. 2005), Slovakia (Stejskal 2012), or Poland (Wanat 2018). It is currently known from the western, central, and southern parts of Europe. It has also been confirmed in the Canary Islands and Ukraine, and in Asia it occurs in Israel, Iran, and Japan (Alonso-Zarazaga et al. 2023). It has been introduced into southern Africa for biological control of *Azolla filiculoides* (McConnachie et al. 2003). Its occurrence in the Czech Republic has been expected due to the presence of the host plant, and has now finally been confirmed. New species for the Czech Republic.

Entiminae

Phyllobius (Metaphyllobius) pilicornis Desbrochers des Loges, 1872. Moravia bor., Štramberk, Šipka National Nature Monument, Kotouč hill (6474), 49°35'02"N, 18°06'46"E, 30.v.2022, 2 ♀♀, 14.vi.2022, 1 ♂, 12.vi.2023, 2 ♂♂ (Fig. 2), all specimens were beaten from *Ulmus glabra*, J. Flanderka leg., det. et coll.

The species is known from southeastern Europe and the Middle East, where it extends to Moldavia, Romania, Ukraine to southern Poland, Hungary, and Slovakia (Maciejowski & Petryszak 2017, Alonso-Zarazaga et al. 2023). It has been newly discovered in the Netherlands and the United Kingdom, considered as introduced. In both these countries, only females were found and the species probably reproduces parthenogenetically here (Heijerman & Hellingman 2015, Gurney 2023). Benedikt et al. (2010, 2022) reported the species only from Slovakia. New species for the Czech Republic.

Lixinae

Lixus (Dilixellus) fasciculatus Boheman, 1835 (Fig. 3). Bohemia centr.: Načeradec (6355), 17.vi.2021, 1 spec., 7.vi.2023, 4 spec., 15.vi.2023, 6 spec., all specimens were found on *Artemisia vulgaris*, T. Doležal leg., det. et coll.; Praha-Žižkov, Parukářka Park (5952), 50°05'03"N, 14°27'50"E, 3.vii.2024, 1 spec., swept from *A. vulgaris*, F. Trnka leg., det. et coll.

This Eurasian species is distributed from central Europe to Siberia and northern China, extending to the Pacific Ocean (Dieckmann 1983, Alonso-Zarazaga et al. 2023). In Central Europe, the expansion of the species is currently underway. In Austria it was first recorded in 1990 (Lucht & Klausnitzer 1998). The occurrence in Poland was for a long time restricted to the easternmost part of the area around Przemyśl (Smreczyński 1968), and the recent distribution of the species is summarized by Kowalczyk et al. (2023). The first records of the species in Slovakia were made by Roubal (1937–1941), but in recent years there has been a massive expansion of the species (Benedikt et al. 2022). In the 1970s and 1980s, the species appeared in Germany (Dieckmann 1983, Rheinheimer & Hassler 2010). In Hungary it was considered very rare in the middle of the 20th century (Endrödi 1960). In Switzerland, the first dated records are from the early 1900s and 1950s (Germann 2007). In the fauna of the Czech Republic, it is a modern element (Benedikt et al. 2010). The oldest known records from Moravia known to us are from 2008 (Benedikt et al. 2010, 2022, Stejskal & Trnka 2013). New species for Bohemia.

Rhabdorrhynchus echii (Brahm, 1790). Bohemia or.: Hradec Králové, Svinary, Dehetník hill (5761), 20.vii.2024, 1 ♀, M. Mikát leg. det. et coll., J. Krátký rev.; Hradec Králové, Na Plachtě II Nature Monument (5861), 21.viii.2024, 1 spec. (Fig. 4), M. Hanousek observ. and photographed, J. Krátký det. based on photographs.

European species with a range extending into the Asian part of Turkey. Known from the Balkans, Central Europe, Italy, France, Moldova, Ukraine, Spain, Sweden, the European part of Russia, and Turkey (Alonso-Zarazaga et al. 2023). In the Czech Republic, only sporadic historical findings from central, southern, and eastern Bohemia are known (Stejskal & Trnka 2013). The last known findings from Bohemia are from Orlík nad Vltavou (6451), vii.1951, Werner leg., J. Strejček det. et coll. Recently it has been known only from Moravia (Benedikt

et al. 2010, 2022), mainly from the southern part of the area between Mikulov and Znojmo (Stejskal & Trnka 2013). In the last decade, the species has been expanding relatively rapidly in the lowlands of Moravia (F. Trnka, pers. observ.). Confirmed occurrence in Bohemia after 73 years.

Molytinae

Lepyrus armatus Weise, 1893. Bohemia centr.: Čelákovice (5854), without date, 2 spec., Dr. Klička leg. [Ladislav Klička cf. Kolečka 1984], coll. National Museum, Prague, Czech Republic (NMPC, ex coll. L. Klička), P. Jansa det.; Dobřichovice (6051), 30.vi.1907, 1 spec., without collector's name, coll. NMPC, P. Jansa det.; Rožmitál (6349), without collector's name, P. Jansa det., coll. NMPC (ex coll. K. Syrovátka), most probably it is Rožmitál pod Třemšínem, where Karel Syrovátka collected during his life (Kolečka 1993); Bohemia mer.: Chlum u Třeboně (7055), without date, 2 spec. (Fig. 5), J. Niedl leg., R. Stejskal det., coll. NMPC (ex coll. R. Veselý); Artolec, Čtyřcítka (6956), 2.vii.2013, 1 spec., P. Hesoun leg., V. Křivan det. et coll., F. Trnka revid.

This European species is known mainly from Central Europe (Austria, Czech Republic, Germany, Hungary, Slovakia, and Switzerland), but also from Croatia, Italy, and Slovenia (Alonso-Zarazaga et al. 2023). In the Czech Republic, the species is known from Moravia (Benedikt et al. 2010, 2022), only from Vysočina and South Moravian regions (Strejček 1993, Křivan & Stejskal 2009). New species for Bohemia.

ACKNOWLEDGEMENTS. We would like to thank the reviewers Stanislav Benedikt (Plzeň, Czech Republic) and Jiří Skuhrovec (Praha, Czech Republic) for valuable information, advice and comments on the text. For the photographs of the specimens, we are grateful to Jiří Hájek (National Museum, Praha, Czech Republic), Martin Hanousek (Hradec Králové, Czech Republic), and Vojtěch Rýznar (Ostrava, Czech Republic).

REFERENCES

- ALONSO-ZARAZAGA M. A., BARRIOS H., BOROVEC R., BOUCHARD P., CALDARA R., COLONNELLI E., GÜLTEKIN L., HLAVÁČ P., KOROTYAEV B., LYAL C. H. C., MACHADO A., MEREGALLI M., PIEROTTI H., REN L., SÁNCHEZ-RUIZ M., SFORZI A., SILFVERBERG H., SKUHROVEC J., TRÝZNA M., VELÁZQUEZ DE CASTRO A. J. & YUNAKOV N. N. 2023: Cooperative Catalogue of Palaearctic Coleoptera Curculionoidea. 2nd Edition. *Monografías electrónicas de la Sociedad Entomológica Aragonesa* **14**: 1–780.
- BEDEL L. 1902: Description et mœurs d'un nouveau genre de Curculionides de France. *Bulletin de la Société Entomologique de France* **6**: 358–359.
- BENEDIKT S., BOROVEC R., FREMUTH J., KRÁTKÝ J., SCHÖN K., SKUHROVEC J. & TRÝZNA M. 2010: Komentovaný seznam nosatcovitých brouků (Coleoptera: Curculionoidea bez Scolytinae a Platypodinae) České republiky a Slovenska, 1. díl. Systematika, faunistika, historie výzkumu nosatcovitých brouků v České republice a na Slovensku, nástin skladby, seznam. Komentáře k Anthribidae, Rhynchitidae, Attelabidae, Nanophyidae, Brachyceridae, Dryophthoridae, Eirrhinidae a Curculionidae: Curculioninae, Bagoinae, Baridinae, Ceutorhynchinae, Conoderinae, Hyperinae. (Annotated checklist of weevils (Coleoptera: Curculionoidea excepting Scolytinae and Platypodinae) of the Czech Republic and Slovakia Part 1. Systematics, faunistics, history of research on weevils in the Czech Republic and Slovakia, structure outline, checklist. Comments on Anthribidae, Rhynchitidae, Attelabidae, Nanophyidae, Brachyceridae, Dryophthoridae, Eirrhinidae and Curculionidae: Curculioninae, Bagoinae, Baridinae, Ceutorhynchinae, Conoderinae, Hyperinae). *Klapalekiana* **46** (Supplementum): 1–363 (in Czech and English).
- BENEDIKT S., BOROVEC R., KRÁTKÝ J., SCHÖN K., SKUHROVEC J. & STEJSKAL R. 2022: Komentovaný seznam nosatcovitých brouků (Coleoptera: Curculionoidea bez Scolytinae a Platypodinae) České republiky

- a Slovenska. 2. díl. Nový seznam. Komentáře k Brentidae: Apioninae a Curculionidae: Cossoninae, Entiminae, Lixinae, Mesoptiliinae, Molytinae. Dodatkové komentáře k 1. dílu. (Annotated checklist of weevils (Coleoptera: Curculionoidea except for Scolytinae and Platypodinae) of the Czech Republic and Slovakia. Part 2. New checklist. Comments on Brentidae: Apioninae and Curculionidae: Cossoninae, Entiminae, Lixinae, Mesoptiliinae, Molytinae. Supplementary comments on Part 1). *Klapalekiana* **58**: 205–567 (in Czech and English).
- DIECKMANN L. 1983: Beiträge zur Insektenfauna der DDR: Coleoptera - Curculionidae (Tanymericinae, Leptopiinae, Cleoninae, Tanyrhynchinae, Cossoninae, Raymondionyminae, Bagoinae, Tanyphyrinae). *Beiträge zur Entomologie* **33**: 257–381.
- ENDRÖDI S. 1960: *Ormányosbogarak II. Curculionidae II. [Weevils II. (Curculionidae II.)]*. In: BOROS I., DUDICH E., KOTLÁN S., SOÓS L. & SZÉKÉSSY V. (eds): *Magyarország Állatvilága, Fauna Hungariae X (5), Coleoptera V., Strepsiptera*. Akadémiai Kiadó, Budapest, 126 pp. (in Hungarian).
- FERNÁNDEZ CARILLO J. L., FERNÁNDEZ CARILLO E. & ALONSO-ZARAZAGA M. A. 2005: Primera cita de *Stenopelmus rufinus* Gyllenhal, 1835 en la Península Ibérica (Coleoptera, Eirrhinidae). *Graellsia* **61**: 134–140.
- GERMANN CH. 2007: Zweiter Beitrag zur Rüsselkäfer-Fauna der Schweiz – mit der Meldung von 23 weiteren Arten (Coleoptera, Curculionoidea). *Mitteilungen der Schweizerischen Entomologischen Gesellschaft* **80**: 167–184.
- GURNEY M. 2023: *Phyllobius pilicornis* (Desbrochers des Loges) (Curculionidae) new to Britain. *The Coleopterist* **32** (3): 137–142.
- HEIJERMAN T. & HELLINGMAN S. 2015: *Phyllobius pilicornis*, een nieuwe exoot voor Nederland en een bijzonder geval van geografische parthenogenese (Coleoptera: Curculionidae). [*Phyllobius pilicornis*, a new exotic species for the Netherlands and a special case of geographical parthenogenesis (Coleoptera: Curculionidae)]. *Entomologische Berichten* **75**: 110–117 (in Dutch).
- JANSON O. E. 1921: *Stenopelmus rufinus* Gyll., an addition to the list of British Coleoptera. *The Entomologist's Monthly Magazine* **57**: 225–226.
- KOLEŠKA Z. 1984: Seznam biografii československých entomologů (entomologové nežijící) I. Pokračování 6. [List of biographies of Czechoslovak entomologists (entomologists nonliving) I. Continuation 6.]. *Zprávy Československé Společnosti Entomologické při ČSAV* **19**: 170–208 (in Czech).
- KOLEŠKA Z. 1993: Seznam biografii československých entomologů (entomologové nežijící) – 14. pokračování. [List of biographies of Czechoslovak entomologists (entomologists nonliving) – Continuation 14.]. *Klapalekiana* **29** (Supplementum): 493–564 (in Czech).
- KOWALCZYK M., CZARNIAWSKI W., RYSIAK A. & WAGNER G. K. 2023: *Lixus fasciculatus* Boheman, 1836 (Coleoptera: Curculionidae) – a nationally rare weevil species recorded on the Czechowskie Hills in Lublin (East Poland). *Fragmenta Faunistica* **66**: 37–42.
- KŘIVAN V. & STEJSKAL R. 2009: Zajímavé nálezy brouků (Coleoptera) z Českomoravské vrchoviny – 1. (Interesting Records of Beetles (Coleoptera) from the Bohemian-Moravian Highlands – 1). *Acta Rerum Naturalium* **6**: 29–34.
- LUCHT W. & KLAUSNITZER B. 1998: *Die Käfer Mitteleuropas, Band 15, 4. Supplementband*. Goecke & Evers, Krefeld, 398 pp.
- MACIEJOWSKI W. & PETRYSZAK B. 2017: Nowe dla Wyżyny Krakowsko-Wieluńskiej i rzadkie gatunki ryjkowcowatych (Coleoptera: Curculionoidea) z południowej części Wyżyny Krakowsko-Częstochowskiej. [New for the Kraków-Wieluń Upland and rare species of weevils (Coleoptera: Curculionoidea) from the southern part of the Kraków-Częstochowa Upland.]. *Wiadomości Entomologiczne* **36**: 36–45 (in Polish).
- MANZEK E. 1927: *Stenopelmus rufinus* Gyll., ein für Deutschland neuer Käfer. *Entomologische Blätter* **23**: 189–191.
- MCCONNACHIE A. J., DE WIT M. P., HILL M. P. & BYRNE M. J. 2003: Economic evaluation of the successful biological control of *Azolla filiculoides* in South Africa. *Biological Control* **28**: 25–32.
- O'BRIEN C. W. & ANDERSON D. M. 1996: *A catalog of the Coleoptera of America North of Mexico. Family: Curculionidae, subfamily Eirrhininae*. United States Department of Agriculture, Agriculture Handbook no. 529-143f. United States Department of Agriculture, Washington, D.C., 40 pp.
- PODLUSSÁNY A. 2001: Új ormányosalkatú bogárfajok Magyarország faunájában (Coleoptera: Curculionoidea). (Curculionid beetle species new for the fauna of Hungary (Coleoptera: Curculionoidea)). *Folia Entomologica Hungarica* **62**: 372–378 (in Hungarian and English).
- RHEINHEIMER J. & HASSLER M. 2010: *Die Rüsselkäfer Baden-Württembergs*. Verlag Regionalkultur & LUBW Landesanstalt für Umwelt, Messungen und Naturschutz Baden-Württemberg, Karlsruhe, 944 pp.

- ROUBAL J. 1937–1941: *Katalog Coleopter (Brouků) Slovenska a východních Karpat na základě bionomickém a zoogeografickém a spolu systematický doplněk Ganglbauerových Die Käfer von Mitteleuropa a Reitterovy Fauna Germanica. Díl III. (Katalog der Coleopteren der Slowakei und der Ost-Karpathen auf bionomischer und zoogeographischer Grundlage und zugleich Ergänzungen Ganglbauer's „Die Käfer von Mitteleuropa“ und zu Reitter's „Fauna Germanica“. III. Teil).* Orbis, Praha, 363 pp. (in Czech, German and French titles).
- SMRECZYŃSKI S. 1968: *Klucze do oznaczania owadów Polski, Część XIX, Chrząszcze – Coleoptera. Zeszyt 98c, Ryjkowce-Curculionidae, Podrodziny Tanymecinae, Cleoninae, Tanyrhynchinae, Hylobiinae.* [Keys to the identification of Polish insects, Part XIX, Beetles – Coleoptera, No. 98c, Weevils-Curculionidae, subfamilies Tanymecinae, Cleoninae, Tanyrhynchinae, Hylobiinae]. Państwowe wydawnictwo naukowe, Warszawa, 106 pp. (in Polish).
- STREJČEK J. 1993: Faunistické, bionomické a taxonomické poznámky k mandelinkovitým (Chrysomelidae s.lat.) a nosatcovitým (Curculionidae s.lat.) České a Slovenské republiky (Coleoptera). (Faunistische, bionomische und taxonomische Bemerkungen zu den Familien Chrysomelidae s.lat. und Curculionidae s.lat. aus der Tschechischen und Slowakischen Republic (Coleoptera)). *Klapalekiana* **29**: 131–135 (in Czech, German summary).
- STEJSKAL R. 2012: First record of *Stenopelmus rufinus* Gyllenhal, 1835 (Coleoptera: Eirrhinidae) for Slovakia, with distribution and bionomic notes. *Weevil News* **74**: 1–5.
- STEJSKAL R. & TRNKA F. 2013: Nosatci tribu Cleonini a rodu *Lixus* (Coleoptera: Curculionidae, Lixinae) v České republice. (Weevils of the tribe Cleonini and the genus *Lixus* (Coleoptera: Curculionidae, Lixinae) in the Czech Republic). *Klapalekiana* **49**: 111–184 (in Czech, English summary).
- WANAT M. 2018: First record of *Stenopelmus rufinus* Gyllenhal, 1835 (Coleoptera: Curculionidae) from Poland. *Polish Journal of Entomology* **87**: 65–75.



Figs 1–5. 1 – *Stenopelmus rufinasus* (Děhylov, Štěpán Nature Reserve), 2 – *Phyllobius pilicornis*, male and female (Štramberk, Šipka National Nature Monument), 3 – *Lixus fasciculatus* (Znojmo), 4 – *Rhabdorrhynchus echii* (Hradec Králové, Na Plachtě II Nature Monument), 5 – *Lepyrus armatus* (Chlum u Třeboně). Photographs by F. Trnka (1, 3), V. Rýznar (2), M. Hanousek (4), and J. Hájek (5).

Obr. 1–5. 1 – *Stenopelmus rufinasus* (Děhylov, přírodní rezervace Štěpán), 2 – *Phyllobius pilicornis*, samec a samice (Štramberk, národní přírodní památka Šipka), 3 – *Lixus fasciculatus* (Znojmo), 4 – *Rhabdorrhynchus echii* (Hradec Králové, přírodní památka Na Plachtě II), 5 – *Lepyrus armatus* (Chlum u Třeboně). Fotografie F. Trnka (1, 3), V. Rýznar (2), M. Hanousek (4) a J. Hájek (5).