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Interesting records of small carrion beetles (Coleoptera: Leiodidae: Cholevinae) from Slovakia

Zajímavé nálezy práchnivců (Coleoptera: Leiodidae: Cholevinae) ze Slovenska

Jan RŮŽIČKA¹⁾ & Jiří Ch. VÁVRA²⁾

¹⁾Department of Ecology, Faculty of Environmental Sciences, Czech University of Life Sciences Prague, CZ-165 21 Praha 6 – Suchbátka, Czech Republic;

e-mail: ruzickajan@fzp.czu.cz

²⁾Ostravian Museum, Masarykovo náměstí 1, CZ-702 00 Ostrava 1, Czech Republic;

e-mail: jiri.vavra@ostrmuz.cz

Faunistics, Coleoptera, Leiodidae, Cholevinae, Slovakia, central Europe

Abstract. New distributional records are presented for seven taxa of small carrion beetles (Coleoptera: Leiodidae: Cholevinae) from Slovakia: *Anemadus strigosus strigosus* (Kraatz, 1852), *Catops nigricantoides* Reitter, 1901, *C. ventricosus rotundatus* Szymczakowski, 1963, *Dreposcia umbrina* (Erichson, 1837), *Eocatops pelopis pelopis* (Reitter, 1884), *Nemadus (Nemadus) colonoides* (Kraatz, 1851) and *Ptomaphagus (Merodiscus) validus* (Kraatz, 1852). Their known distribution in Slovakia is summarized and mapped and information about their ecology is presented.

INTRODUCTION

At present, 51 species of small carrion beetles (Coleoptera: Leiodidae: Cholevinae) are reported from Slovakia (Majzlan 1999, Perreau 2004). The first comprehensive review of Slovak Cholevinae was made by Roubal (1930, 1937-1941), with supplementary records published by Havelka (1964). Additional distributional data can be found in many local faunistic papers (e.g., Szymczakowski 1956, Korbel 1951, Franc 1992a,b, 1997, Růžička 1993, Hlaváč & Lackner 1998 and many others). The only recent review of distribution for Slovak *Choleva* Latreille, 1796 was published by Růžička & Vávra (1993).

In the present paper, we summarize published and unpublished distributional records of seven species, which are treated as rare and local based on the literature. These species have specific ecology, which is summarized below under each of the species.

MATERIALS AND METHODS

Here we treated only previously unpublished data. The only exceptions are records of Roubal (1930, 1937-41), published originally only in abbreviated form, and treated here in full.

Specimens for this study came from the following museums and private collections (acronyms of public institutions according to Arnett et al. 1993):

APEC – collection of Antonín Peutlschmid, Olomouc, Czech Republic;

BZBC – collection of Bořivoj Zbuzek, Praha, Czech Republic;

FPAC – collection of Filip Pavel, Hradec Králové, Czech Republic;

HNHM – Magyar Természettudományi Múzeum, Budapest (Ottó Merkl);

IJEC – collection of Ivo Jeniš, Náklo, Czech Republic;

- ISMC – collection of Ivo Smatana, Košice, Slovakia;
 JBRC – collection of Jiří Brokeš, Litomyšl, Czech Republic;
 JHOC – collection of František Houška, České Budějovice, Czech Republic;
 JJAC – collection of Jiří Janák, Rtyně nad Bílinou, Czech Republic;
 JJNC – collection of Jiří Januš, Kladno, Czech Republic;
 JMCB – Jihočeské muzeum, České Budějovice, Czech Republic (Zdeněk Kletečka);
 JNEC – collection of Jiří Nežerka, Trinec, Czech Republic;
 JPRC – collection of Jaroslav Prouza, Litoměřice, Czech Republic;
 JRUC – collection of Jan Růžička, Praha, Czech Republic;
 JVAC – collection of Jiří Vávra, Ostrava, Czech Republic;
 MVCH – Muzeum východních Čech v Hradci Králové, Hradec Králové, Czech Republic (Miroslav Mikát);
 LKLC – collection of Libor Klíma, Ostrava, Czech Republic;
 MJMC – Muzeum jihovýchodní Moravy, Zlín, Czech Republic (Dušan Trávníček);
 MMAC – collection of Marion Mantič, Hlučín – Bobrovniky, Czech Republic;
 MSVC – collection of Martin Švarc, Liberec, Czech Republic;
 MZYC – collection of Miroslav Zýka, Rakovník, Czech Republic;
 NHMB – Naturhistorisches Museum, Basel (Daniel Burckhardt, Michel Brancucci);
 NMPC – Národní muzeum, Praha (Josef Jelínek, Jiří Hájek);
 PHLC – collection of Peter Hlaváč, Košice, Slovakia;
 PKOC – collection of Peter Koniar, Praha, Czech Republic;
 PMOC – collection of Pavel Moravec, Litoměřice, Czech Republic;
 PŠTC – collection of Petr Štourač, Praha, Czech Republic;
 RLOC – collection of Roman Lohaj, Košice, Slovakia;
 RROC – collection of Rudolf Rous, Praha, Czech Republic;
 SNMB – Slovenské národné múzeum, Bratislava (†Iľja Okáli, Ivo Rychlík);
 SURC – collection of Stanislav Urban, Kladno, Czech Republic;
 TLAC – collection of Tomáš Lackner, Košice, Slovakia;
 VKOC – collection of Václav Kocourek, Praha, Czech Republic;
 VTYC – collection of Václav Týr, Žihle, Czech Republic.

Each locality is provided with a grid reference according to Zelený (1972). Within each species, localities are sorted according to their grid references from north to south and then from west to east. All specimens were identified or reviewed by Jan Růžička or Jiří Vávra. Nomenclature of ants follows Werner & Wiegand (2007).

RESULTS

Anemadus strigosus strigosus (Kraatz, 1852)

Material examined. Slovakia: Kral'ovany (6880), 4.vi.1937, M. Fluge leg., 1 ♂ (coll. J. Hlisnikovský in NMPC); Opatovce (7173), 25.x.1997, M. Mantič leg., hollow in *Populus*, sifted, 1 ♀ (MMAC); Úbřež [= Úbrež] (7299), vi.1957, J. Gottwald leg., 1 ♂, 2 ♀♀ (coll. J. Gottwald in NHMB); Hronská Breznica (7479), v.1935, J. Roubal leg., 1 spec. (coll. J. Roubal in SNMB); Veľaty (7495), 22.-24.vii.2002, I. Smatana leg., 1 ♀ (ISMC); Malacky (7568), v.1965, R. Rous leg., 2 ♀♀ (RROC); Veľký Blh env., Teplý Vrch – Malá obora (7586), 28.viii.1997, M. Mantič leg., poly pores on *Quercus*, 1 ♀ (MMAC); Plavecký Štvrtok (7668), 19.vi.1982, with *Lasius brunneus*, I. Jeniš leg., 3 ♀♀ (IJEC); Modra (7669), 2.vi.1998, A. Peutlschmid leg., 1 ♂ (extremely teneral) (APEC); Svätý Jur, Jurský Šúr (7769), iv.1968, J. Gottwald leg., 1 ♀ (teneral) (coll. J. Gottwald in NHMB); same locality, 5.vii.1999, M. Švarc leg., 1 ♂, 1 ♀ (MSVC); Svätý Jur (7769), 7.vi.2003, F. Pavel leg., 1 ♀ (FPAC); Svätý Jur, Panónsky háj (7769), 13.-14.v.1994, J. Janák leg., with *Lasius brunneus*, 1 ♂ (JJAC); Devínska Nová Ves (7867), 1940, V. Depta leg., 1 spec. (SNMB); Bratislava (7868-69), 18.vi.1987, E. Jendek leg., 1 ♂, 1 ♀ (JVAC); Petržalka (7868), 1.vi.1946, V. Depta leg., 1 spec. (SNMB); Kováčov

(8178), iii.1936, J. Roubal leg., 1 spec. (coll. J. Roubal in SNMB); same locality, 4.v.1936, J. Roubal leg., on *Salix*, 2 spec. (coll. J. Roubal in SNMB); Štúrovo (81-8278), 16.vi.1985, P. Štourač leg., 1 ♂ (PŠTC); Zlatná na Ostrově (8273), 13.vii.1996, M. Mantič leg., 1 ♀ (MMAC); Komárno (8274), 10.v.1931, Roubal leg., 1 ♂ (coll. J. Havelka in NMPC); same locality, 10.v.1931, J. Roubal leg., from *Salix*, 1 spec. (coll. J. Roubal in SNMB); Čenkov (8277), 7.vi.1972, S. Bílý leg., 1 ♂ (JBRC).

Distribution. Western Palaearctic species, distributed from Germany and Italy to Romania and the Balkan Peninsula (Perreau 2004), populations from Turkey are differentiated as *A. s. saulcyi* Jeannel, 1936 (Perreau 2004).

Reported by Roubal (1937-1941) from Slovakia: Seleška (7392); Franc (1992a-c, 1997): Kunerád (6978), Banská Bystrica (72-7380-81), Hronská Breznica (7479), Teplý Vrch (7586), Dobrá Niva (7580), Devínska Nová Ves (7867), Bratislava – Petržalka (7868), Kováčov (8178), Komárno (8274); Hlaváč & Lackner (1998): Piešťany (73-7472-73), Jurský Šúr (7769); Jászay (2001): Nová Sedlica – dolina Zbojského potoka valley (6900). Records are scattered mostly in warmer regions across the whole Slovakia (Fig. 1).

Ecology. Species known from lowlands to uplands, collected in old trunks and hollows of deciduous trees in well-preserved forests. Loosely associated with ants (mostly with *Lasius brunneus* (Latreille, 1798)) (see Roubal 1930, Franc 1992a,b).

Catops nigricantoides Reitter, 1901

Material examined. Slovakia: Košice (7293), [without date and collector's name], 1 ♂ (JNEC); Piešťany (73-7472-73), vi.1961, J. Gottwald leg., 1 ♂ (coll. J. Gottwald in NHMB); Gyňov (7493), 17.x.2002, I. Smatana leg., 1 ♂ (ISMC); Malý Kamenec (7696), 11.x.1996, P. Koniar leg., 1 ♂ (PKOC); Tvrdošovce (7974), 30.iv.1999, salt steppe, sweeping, M. Mantič leg., 1 ♀ (MMAC); Šahy – Tešmak (7979), 28.v.1994, P. Moravec leg., 1 ♂ (PMOC); Kamenín (8177), vii.1956, J. Gottwald leg., 2 ♂♂ (coll. J. Gottwald in NHMB); same locality, 16.vi.1987, J. Januš leg., 2 ♂♂, 1 ♀ (JJNC); same data, 1 ♂ (JRUC); same locality, 14.v.1989, S. Urban leg., 1 ♂ (SURC); Štúrovo (81-8278), 19.v.1962, Voříšek leg., 1 ♂ (JRUC); same locality, vi.1963, R. Rous leg., 1 ♂ (RROC); same locality, vi.1967, R. Rous leg., 1 ♂ (JRUC); same locality, v. 1973, M. Kybal leg., 1 ♂ (JRUC); same locality, 4.v.1992, Kučera leg., 1 ♂ (coll. V. Karas in JMCB); Patince (8275), 10.v.1996, J. Prouza leg., 1 ♀ (JPRC); Mužla env., Jurský Chlm (8277), 23.-24.v.1995, steppe terrace, M. Mantič leg., 1 ♂ (MMAC); same locality, 24.v.2005, F. Houška leg., 1 ♂ (FHOC).

Distribution. Western Palaearctic species, distributed from Germany and Switzerland to Transcaucasia and Iran (Perreau 2004).

Older records from Slovakia were provided by Strejček (1965) and Majer (1980): Štúrovo (81-8278); Gottwald (1968): Piešťany (73-7472-73); Zwick (1981): Kamenín (8177); and reviewed by Růžička (1993): Bratislava (7868), Tvrdošovce (7974), Štúrovo (8178), Hegyfárok [= south-eastern part of Belianske kopce hills] (8178) and Kamenica nad Hronom (8178). Distributed only in the warm regions of Slovakia, here we present for the first time records from south-eastern Slovakia (Fig. 2).

Ecology. Known from open landscape on xerothermous habitats, often associated with nests of mammals (e.g., *Vulpes vulpes* Linnaeus, 1758, *Oryctolagus cuniculus* Linnaeus, 1758; J. Růžička & J. Vávra, unpubl. data).

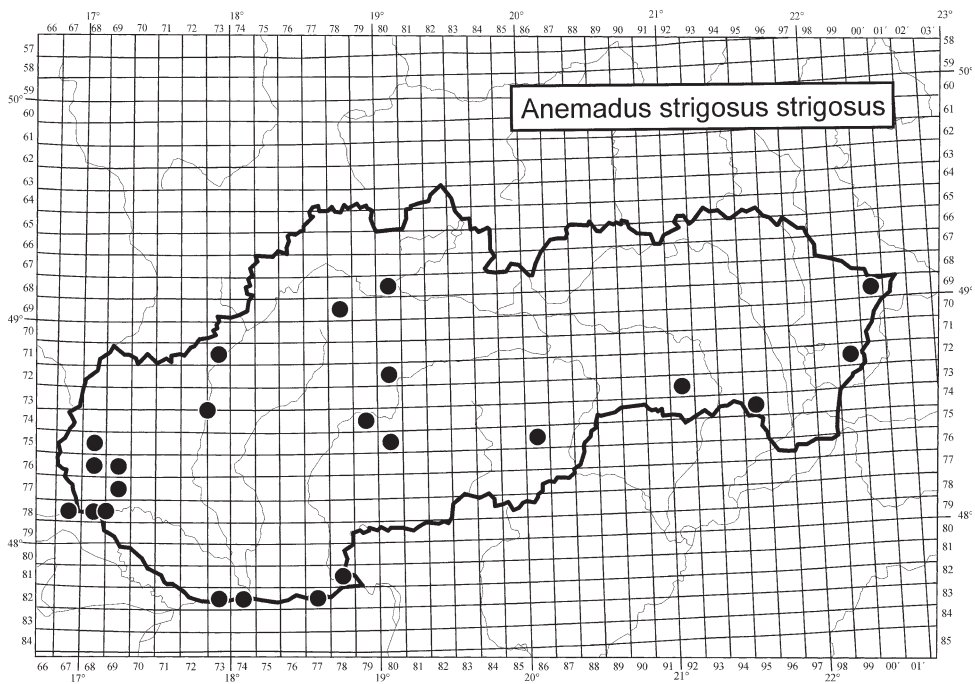


Fig. 1. Distribution of *Anemadus strigosus strigosus* (Kraatz, 1852) in Slovakia.

Obr. 1. Rozšíření druhu *Anemadus strigosus strigosus* (Kraatz, 1852) na Slovensku.

Catops ventricosus rotundatus Szymczakowski, 1963

Material examined. Slovakia: Belianske Tatry mts., Javorina [= Tatranská Javorina] (6786), 1200 m, 20.-26.vi.1982, F. Krampl leg., 1 ♂ (NMPC); M. Tátra, Felkai völgy [= Vysoké Tatry mts, Velická dolina valley] (6887), 1350-1450 m, 11.vii.1962, Endrődy-Younga leg., ex sterc. equi [= from horse dung], 1 ♂ (HNHM).

Distribution. Western Palearctic species with discontinuous distribution from Spain, France and Italy to Poland and Slovakia (Perreau 2004), populations from north-western Turkey and Transcaucasia are treated as *C. v. ventricosus* (Weise, 1878).

An older record from Slovakia was published by Szymczakowski (1956): Vysoké Tatry mts., Veľká studená dolina valley (6887); Růžička (1993): Vysoké Tatry mts., Zlomisková dolina valley (6886), the species is currently known from Slovakia only from Vysoké Tatry mountains (Fig. 6). Szymczakowski (1971) also briefly mentioned an imprecisely localised record from "Slovenské Rudohorie mts" in central Slovakia – this needs further confirmation.

Ecology. Known mostly from alpine habitats well above the tree-line (J. Růžička & J. Vávra, unpubl. data from Ukraine), record from Tatranská Javorina is exceptional for its relatively low altitude (only 1200 m).

Dreposcia umbrina (Erichson, 1837)

Material examined. Slovakia: Trenčianské Teplice (7075), [without date], Kočí leg., 1 spec. (SNMB); Herľany (7194), [without date], Machulka leg., 1 ♂ (coll. J. Hlisenikovský in NMPC); same locality, 4.iv.1999, F. Pavel leg., 1 ♀ (FPAC); Remetské Hámre (7199),

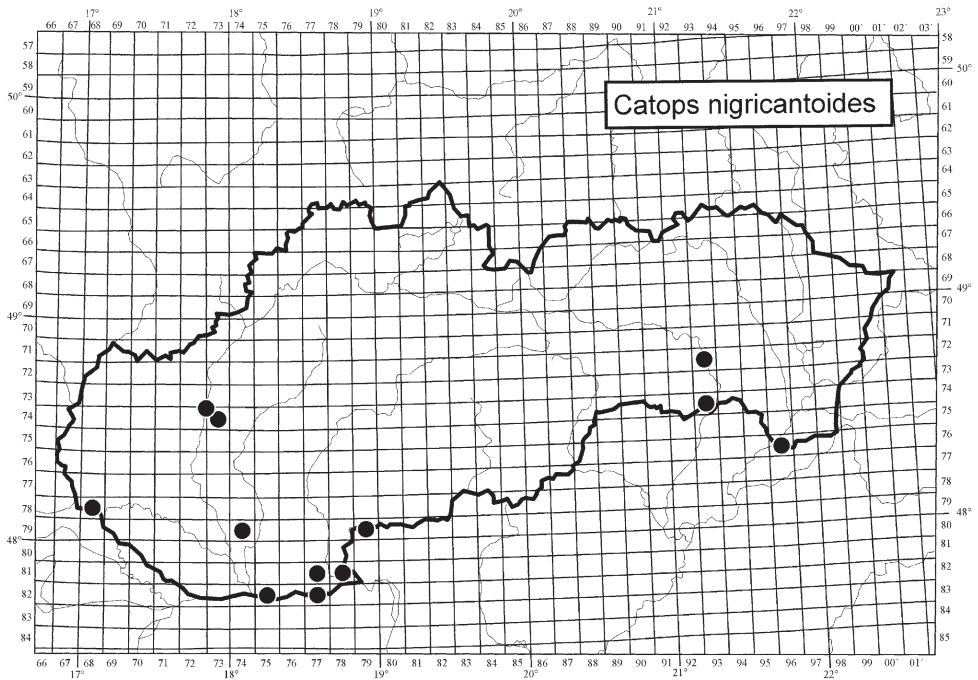


Fig. 2. Distribution of *Catops nigricantoides* Reitter, 1901 in Slovakia.
Obr. 2. Rozšíření druhu *Catops nigricantoides* Reitter, 1901 na Slovensku.

7.vii.1953, A. Smetana leg., 1 ♂ (JRUC); Petrovce (7299), 12.ix.1992, I. Smetana leg., hollow in *Quercus*, 1 ♀ (ISMC); same locality, 22.vi.1994, P. Hlaváč leg., 1 ♀ (JRUC); same locality, 20.vii.1994, B. Zbuzek leg., 1 ♀ (BZBC); same locality, 4.v.1996, P. Koniar leg., 1 ♂, 1 ♀ (PKOC); same locality, 4.v.1996, P. Hlaváč leg., 1 ♂ (PHLC); same locality, 25.v.1996, P. Koniar leg., 1 ♂ (PKOC); Hronská Breznica (7479), v.1933, J. Roubal leg., 1 spec. (coll. J. Roubal in SNMB); Zvolen (7480), [without date], R. Rous leg., 2 spec. (RROC); same locality, xi.1950, A. Olexa leg., 1 ♂ (JVAC); same locality, v.1952, A. Olexa leg., 1 ♂, 1 ♀ (JVAC); same locality, x.1953, A. Olexa leg., 1 ♂ (JVAC); Malacky (7568), vi.1986, V. Kubáň leg., 1 ♂ (JRUC); same locality, 4.v.1987, E. Jendek leg., 1 ♀ (JVAC); same locality, 27.x.1989, I. Jeniš leg., 1 ♀ (IJEC); Dobrá Niva (7580), 13.vii.2002, M. Zýka leg., 2 ♂♂, 1 ♀ (MZYC); Velký Blh (7586), v.1930, J. Roubal leg., 1 spec. (coll. J. Roubal in SNMB); same locality, 2.v.1930, J. Roubal leg., 1 ♂ (JNEC); Plavecký Štvrtok (7668), 1.v.1988, O. Šauša leg., 3 ♂♂ (2 spec. teneral) (JVAC); Ladov (7684), 7.vi.1936, J. Roubal leg., 1 spec. (coll. J. Roubal in SNMB); Rimavská Sobota (7686), v.1924, J. Roubal leg., 2 spec. (coll. J. Roubal in SNMB); same locality, 4.v.1924, J. Roubal leg., 1 ♀ (coll. J. Volák in MVCH); same locality, v.1925, J. Roubal leg., 2 spec. (coll. J. Roubal in SNMB); same locality, v.1926, J. Roubal leg., 1 ♀ (coll. J. Volák in MVCH); Pajštún [= Borinka] (7768), vi.1944, V. Depta leg., 1 spec. (SNMB); same locality, 6.v.1995, P. Hlaváč leg., 1 ♂ (PHLC); Jur pri Bratislave [= Svätý Jur] (7769), 11.iv.1982, I. Jeniš leg., 1 ♀ (IJEC); same locality, 16.v.1982, R. Fornůsek leg., 1 ♂ (present deposition unknown); Svätý Jur, Jurský Šúr (7769), v.1944, V. Depta leg., 3 ♂♂ (SNMB);

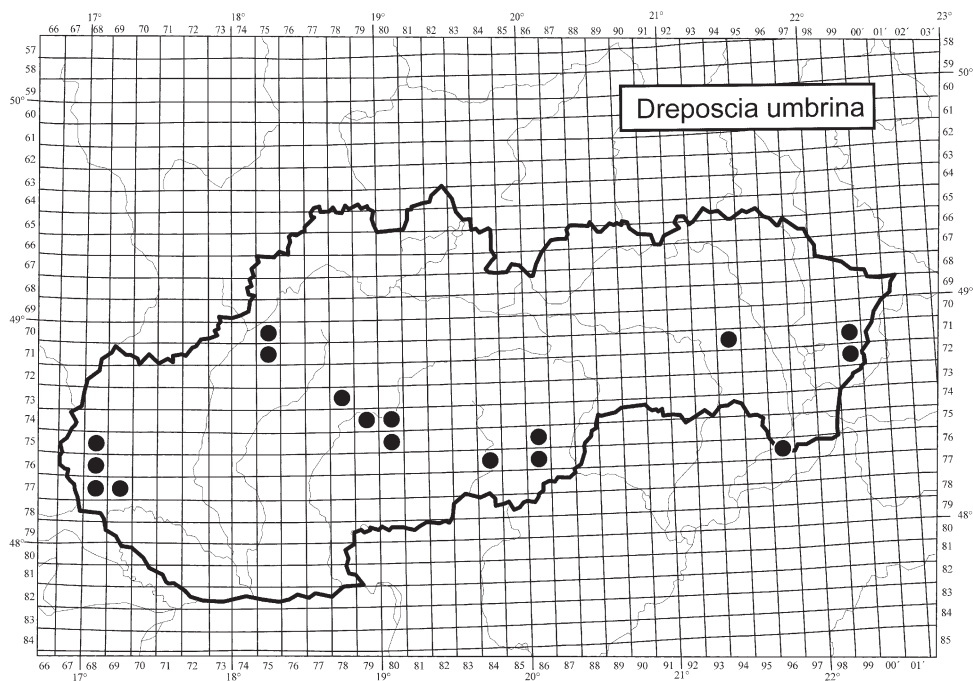


Fig. 3. Distribution of *Dreposcia umbrina* (Erichson, 1837) in Slovakia.
 Obr. 3. Rozšíření druhu *Dreposcia umbrina* (Erichson, 1837) na Slovensku.

same locality, 7.v.1950, V. Depta leg., 1 spec. (SNMB); same locality, 21.xi.1984, M. Štrba leg., 1 ♂ (LKLC); same locality, 30.v.1998, V. Kocourek leg., 1 ♀ (VKOC); same locality, 22.vi.2008, O. Majzlan leg., Quercetum, 1 ♂ (JRUC); same locality, 8.v.2009, O. Majzlan leg., Quercetum, 2 ♀♀ (JRUC).

Distribution. Western Palaearctic species, distributed from central and southern Europe to Ukraine and Russia (Perreau 2004).

From Slovakia reported by Roubal (1930): Omšenie (7175), Herľany (7194), Veľký Blh (7586), Rimavská Sobota (7686), Slovenské Nové Mesto pod Šiatrom [= Slovenské Nové Mesto/Sátoraljaújhely] (7696); Korbel (1951): Svätajurský šúr [= Jurský Šúr] (7769); Havelka (1964; as *Depronia umbrina*): Remetské Hámre (7199), Handlová (7278); Hlaváč & Lackner (1998): Petrovce (7299), Jurský Šúr (7769). This species is known from Slovakia from several isolated localities, mostly from forested habitats in lowland and middle altitude (Fig. 3).

Ecology. In cavities of old and damaged deciduous trees in naturally rich forested habitats, from lowland to hills. Frequently associated with *Lasius brunneus* (Roubal 1930, Franc 1992c). Roubal (1930) characterized it ecologically as a “stenoecous quercicole”, but it occurs also in other deciduous tree species such as *Populus* spp., *Ulmus* spp. or *Aesculus hippocastanum* (J. Vávra, unpubl. data). In southern Moravia, pupae of *D. umbrina* were found in a cavity of large stem of *Populus* cf. *alba*, in black detritus produced by larvae of *Protaetia aeruginosa* (Drury, 1770) (Scarabaeidae). Larvae of *D. umbrina* form cocoons from detritus before pupation, similar in appearance to those of *Ampedus dubius* (Platia et Cate, 1990) or *Elater ferrugineus ferrugineus* Linnaeus, 1758 (both Elateridae) (J. Vávra, unpubl. data).

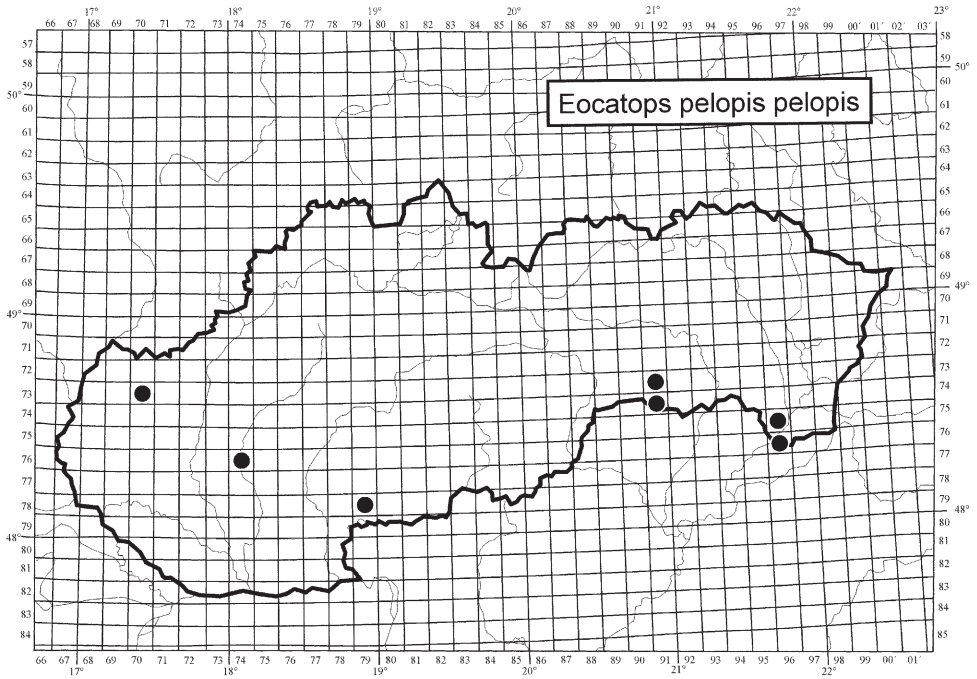


Fig. 4. Distribution of *Eocatops pelopis pelopis* (Reitter, 1884) in Slovakia.
 Obr. 4. Rozšíření druhu *Eocatops pelopis pelopis* (Reitter, 1884) na Slovensku.

***Eocatops pelopis pelopis* (Reitter, 1884)**

Material examined. Slovakia: Turňa nad Bodvou env., Háj (7391), 1.iv.1995, nest of *Messor* under stone, T. Lackner leg., 2 ♂♂ (TLAC); Turňa nad Bodvou (7491), [without date], V. Machulka leg., 1 ♂ (JVAC); same locality, 14.x.1996, T. Lackner leg., 1 ♂ (JRUC); same locality, 1.iv.1998, P. Koniar leg., 1 ♀ (PKOC); same locality, 24.x.1998, P. Koniar leg., 1 ♂ (PKOC); same locality, 26.iii.1999, P. Koniar leg., 1 ♂ (PKOC); same locality, 2.x.1999, P. Koniar leg., 1 ♂ (PKOC); same locality, 31.x.1999, P. Koniar leg., 3 ♂♂, 2 ♀♀ (PKOC); same locality, 7.xi.1999, P. Koniar leg., 1 ♂ (PKOC); same locality, 2.xi.2000, P. Koniar leg., 5 ♂♂, 8 ♀♀ (PKOC, JRUC); same locality, 2.xi.2000, nest of *Messor* under stone, J. Vávra leg., 4 ♂♂, 5 ♀♀ (JVAC); Turňa nad Bodvou env., Turňanský hrad (7391), 19.iii.2003, M. Švarc leg., 2 ♂♂, 2 ♀♀ (MSVC); Koliňany env., Koliňanský vrch hill (7674), 5.vi.2004, above quarry, nest of *Messor* under stone, M. Švarc & P. Koniar leg., 5 ♂♂, 3 ♀♀ (MSVC, PKOC); same locality, 18.v.2007, M. Švarc & P. Koniar leg., 1 ♂ (MSVC); Malý Kamenec (7696), 24.iii.1995, nest of *Messor* under stone, T. Lackner leg., 1 ♂, 1 ♀ (TLAC); same locality, 19.iv.1995, nest of *Messor* under stone, R. Lohaj leg., 1 ♀ (RLOC); same locality, 6.iv.1996, P. Koniar leg., 2 ♀♀ (PKOC); same locality, 7.x.1996, P. Koniar leg., 2 ♂♂ (PKOC); same locality, 11.x.1996, P. Koniar leg., 1 ♀ (PKOC); same locality, 12.iii.1997, nest of *Messor* under stone, P. Koniar leg., 1 ♀ (MSVC); same locality, 1.xi.2000, nest of *Messor* under stone, J. Vávra leg., 1 ♂, 2 ♀♀ (JVAC); Veľký Kamenec env., Tarbucka hill (7696), 8.iv.1995, nest of *Messor* under stone, I. Smatana leg., 1 ♀ (ISMC); same locality, 19.iv.1995, I. Smatana leg.,

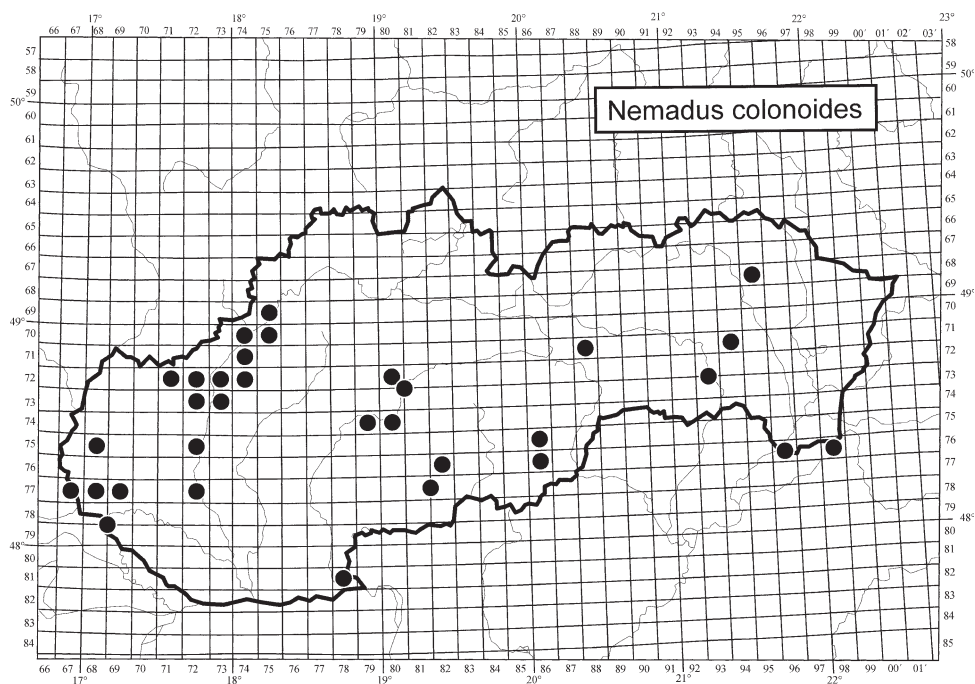


Fig. 5. Distribution of *Nemadus (Nemadus) colonoides* (Kraatz, 1851) in Slovakia.

Obr. 5. Rozšíření druhu *Nemadus (Nemadus) colonoides* (Kraatz, 1851) na Slovensku.

1 ♂ (ISMC); same locality, 25.x.2009, P. Koniar & M. Švarc leg., 1 ♂, 4 ♀♀ (MSVC, PKOC, JRUC); Plášťovce (7879), 29.v.1994, steppe, P. Moravec leg., 1 ♀ (PMOC).

Distribution. Species distributed from the Czech Republic (southern Moravia) and Austria to Greece, Bulgaria, the Ukraine and Russia (Perkovsky & Gontarenko 2002, Perreau 2004). Populations from Finland and Sweden, described as a separate species (Szymczakowski 1975), have recently been treated only as *E. p. lapponicus* Szymczakowski, 1975 by Perkovsky & Gontarenko (2002).

Scattered records from Slovakia, including data from Machulka (1938; as *Nemadus pelopis*): Turňa nad Bodvou (7491); Roubal (1937-1941; as *Nemadus pelopis*): Zádiel (7391); Franc (1992c), Růžička (1993) and Hlaváč & Lackner (1998): Hradište pod Vrátnom (7370), Turňa nad Bodvou, slope of Turňa castle (7391), Malý Kamenec – Tarbucka hill (7696), are restricted to warmer regions (Fig. 4).

Ecology. Myrmecophilous species, associated with nests of *Messor* cf. *structor* (Latreille, 1798) in southern and central Europe (Franc 1992c, Růžička 1993, Hlaváč & Lackner 1998; see Werner & Wiezik (2007) for discussion about nomenclature and taxonomy of *Messor* Forel, 1890 in central Europe), and with *Formica lemni* Bondroit, 1917 in Scandinavia (Szymczakowski 1975, Perkovsky & Gontarenko 2002).

Nemadus (Nemadus) colonoides (Kraatz, 1851)

Material examined. Slovakia: Giraltovcce (6895), 21.ix.1927, V. Depta leg., 4 spec. (SNMB); same locality, ix.1928, V. Depta leg., 2 spec. (SNMB); same locality, 1930, V. Depta leg.,

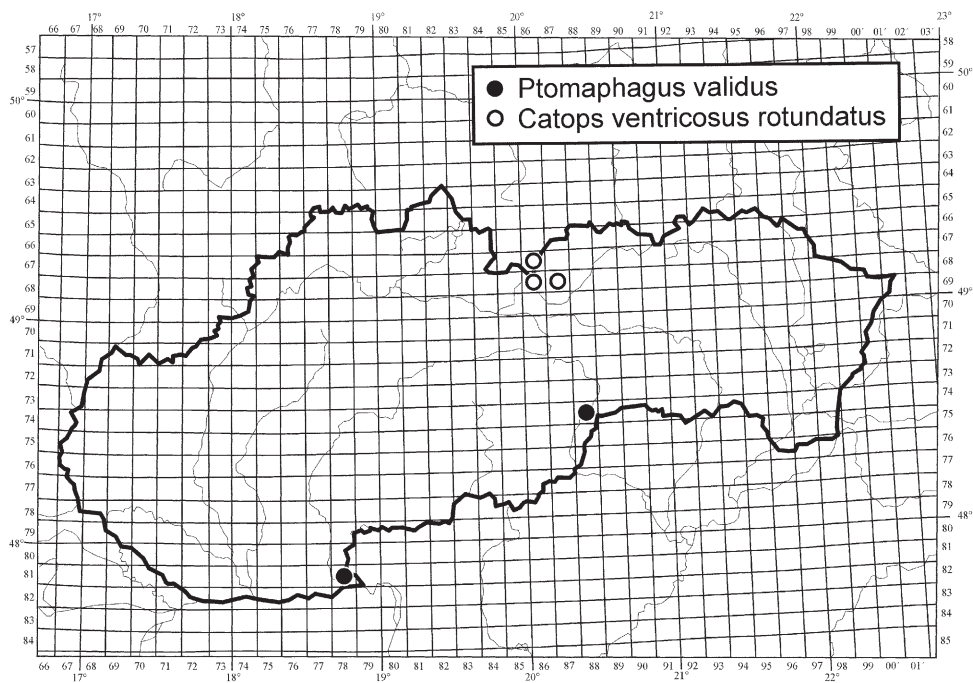


Fig. 6. Distribution of *Catops ventricosus rotundatus* Szymczakowski, 1963 and *Ptomaphagus (Merodiscus) validus* (Kraatz, 1852) in Slovakia.

Obr. 6. Rozšíření druhů *Catops ventricosus rotundatus* Szymczakowski, 1963 a *Ptomaphagus (Merodiscus) validus* (Kraatz, 1852) na Slovensku.

6 spec. (SNMB); same locality, 1932, V. Depta leg., 1 spec. (SNMB); same locality, 1933, V. Depta leg., 7 spec. (SNMB); Boleso-Pého [= Bolešov] (7074), [without date], J. Laco leg., 1 spec. (SNMB); Košecké Podhradie (7075), 28.x.1997, M. Mantič leg., 1 ♂, 3 ♀♀ (MMAC); same locality, 28.x.1997, M. Mantič leg., 2 ♀♀ (JRUC); Trenčianské Teplice (7075), [without date], Kočí leg., 1 spec. (SNMB); Babiná (7188), [without date], J. Roubal leg., 1 ♀ (coll. J. Havelka in NMPC); Herľany (7194), 21.iii.1996, P. Koniar leg., 1 ♀ (PKOC); Myjava (7271), i.1938, V. Depta leg., 1 spec. (SNMB); same locality, v.1938, V. Depta leg., 1 spec. (SNMB); Čachtice (7272), [without date], V. Depta leg., 1 spec. (SNMB); same locality, 1938, V. Depta leg., 1 spec. (SNMB); Trenčín env., Selec (7273), [without date], Kočí leg., 1 spec. (SNMB); Nové Mesto nad Váhom env., Inovec mt. (7274), [without date], A. Richter leg., 1 ♀ (MJMC); Vrbové (7372), [without date], Kočí leg., 2 spec. (SNMB); Nová Lehota (7373), 26.ii.1997, M. Mantič leg., 1 ♀ (MMAC); Zvolen (7480), v.1956, A. Olexa leg., 1 ♂ (JVAC); Zvolen – Stráž [= Stráže] (7480), [without date], J. Roubal leg., 2 spec. (coll. J. Roubal in SNMB, NMPC); Malacky (7568), [without date], J. Laco leg., 1 spec. (SNMB); same locality, 20.ii.1988, I. Jeniš leg., 1 ♀ (IJEC); Hlohovec (7572), 13.vii.1980, V. Kubáň leg., 1 ♂ (JVAC); Turie Pole (7682), 17.v.1931, J. Roubal leg., 1 spec. (coll. J. Roubal in SNMB); Rimavská Sobota (7686), 4.v.1924, J. Roubal leg., 1 spec. (coll. J. Roubal in SNMB); Malé Trakany (7698), 4.ix.1998, I. Smatana leg., 1 ♂ (ISMC); Devínska Nová Ves (7767), 1940, V. Depta leg., 1 spec. (SNMB); same locality, 1941, V. Depta leg., 1 spec. (SNMB); same locality, iv.1941,

V. Depta leg., 2 spec. (SNMB); same locality, 1947, V. Depta leg., 1 spec. (SNMB); same locality, 11.i.1948, V. Depta leg., 1 spec. (SNMB); same locality, 25.i.1948, V. Depta leg., 1 spec. (SNMB); Pajštún [= Borinka] (7768), 1941, V. Depta leg., 1 spec. (SNMB); Svätý Jur, Jurský Šúr (7769), x.1940, V. Depta leg., 1 spec. (SNMB); same locality, xi.1940, V. Depta leg., 2 spec. (SNMB); same locality, 1941, V. Depta leg., 1 spec. (SNMB); same locality, iii.1941, V. Depta leg., 1 spec. (SNMB); same locality, 2.iv.1950, V. Depta leg., 2 spec. (SNMB); Svätý Jur, Panónský háj (7769), 13-14.v.1994, J. Janák leg., *Lasius brunneus*, 1 ♂ (JJAC); Sered' (7772), 1939, V. Depta leg., 2 spec. (SNMB); Bratislava (77-7968-69), 1941, V. Depta leg., 1 spec. (SNMB); same locality, 11.i.1948, V. Depta leg., 1 spec. (SNMB); same locality, 11.viii.1954, I. Löbl leg., 1 spec. (SNMB); Modrý Kameň (7781-82), iv.1928, J. Roubal leg., 1 spec. (coll. J. Roubal in SNMB); Chľaba (8178), 28.ix.2009, M. Mantič leg., 1 spec. (MMAC); Kováčov (8178), 29.iv.1955, A. Smetana leg., 1 ♂, 3 ♀♀ (JRUC, NHMB, NMPC); same locality, 29.iv.1956, A. Smetana leg., 2 ♂♂ (JRUC); "Nízke Tatry" [without more precise locality, date or collector's name], 1 ♀ (NMPC); "Vysoké Tatry" [without more precise locality], x.1945, A. Pfeffer leg., 5 ♂♂, 4 ♀♀ (coll. A. Pfeffer in NMPC).

Distribution. Western Palaearctic species, distributed from France and Great Britain through southern and central Europe and southern Scandinavia to Ukraine and Russia (Perreau 2004).

Reported from Slovakia by Roubal (1930): Trenčín (7174), Košice (72-7393), Hronská Breznica (7479), Leopoldov (7572), Veľký Blh (7586), Rimavská Sobota (7686), Slovenské Nové Mesto pod Šiatrom [= Slovenské Nové Mesto/Sátoraljaújhely] (7696), Modrý Kameň (7781-82); Franc (1992b): Banská Bystrica (72-7380-81), Banská Bystrica env., Urpín hill (7280); Hlaváč & Lackner (1998): Horovce (6975), Jurský Šúr (7769), Šahy (7979). This species is distributed locally in Slovakia, from lowlands to hills, absent from higher altitudes (Fig. 5).

Ecology. Arbicolous species, found in cavities, in rotten wood or under old bark of different deciduous trees (i.e., *Quercus*, *Fagus*, *Populus*, *Salix*, *Tilia*, *Ulmus*, *Aesculus*, *Acer*, *Carpinus*) (Roubal 1930; J. Vávra, unpubl. data); here frequently in association with ants (e.g., *Lasius brunneus*, *L. fuliginosus* (Latreille, 1798)) (Roubal 1930, Franc 1992c, Hlaváč & Lackner 1998), in nests of birds (e.g., *Ardea cinerea* Linnaeus, 1758, *Upupa epops* Linnaeus, 1758) and rodents (e.g., Gliridae), or around nests of hornets (*Vespa crabro* Linnaeus, 1758) (Roubal 1907, Vysoký 2007; J. Vávra, unpubl. data). Majzlan & Rychlík (1992) reported this species from Slovakia (without precise localities) from nests of the following three bird genera: *Dendrocopos* Koch, 1816, *Ficedula* Brisson, 1760 and *Parus* Linnaeus, 1758.

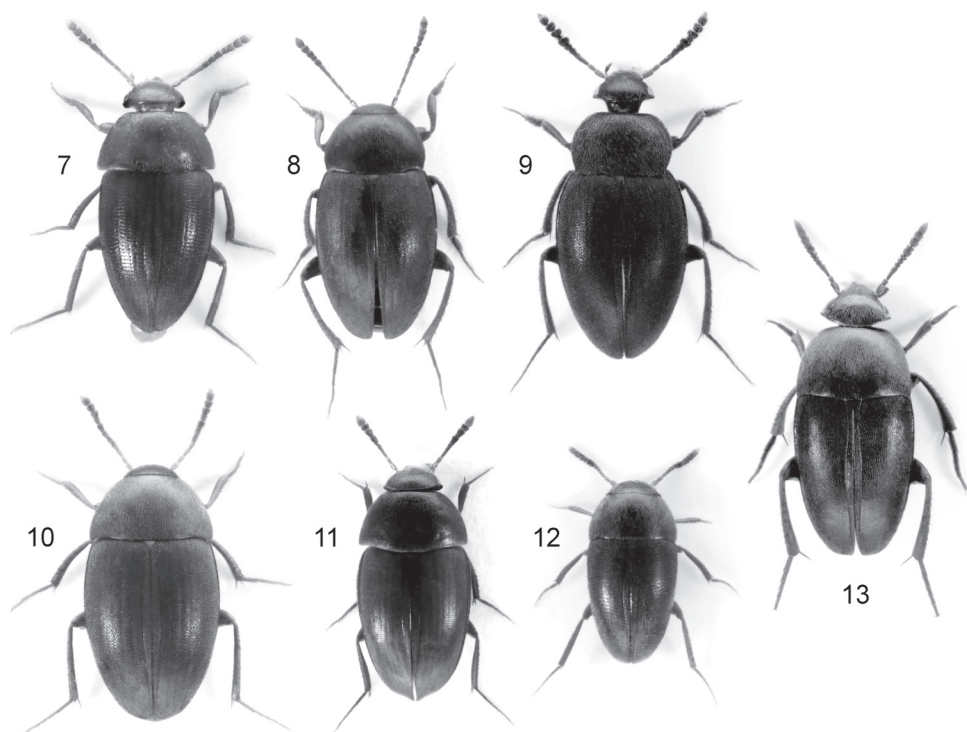
Ptomaphagus (Merodiscus) validus (Kraatz, 1852)

Material examined. Slovakia: 1.5 km SE of Malá nad Hronom [ca. 47°50'N 18°40'E] (8178), 18.-20.iv.2008, loess terraces, near burrows of *Vulpes vulpes*, V. Týr leg., 1 ♀ (VTYC).

Distribution. Species with discontinuous distribution from Slovakia, Hungary and Slovenia to Romania and south-western Ukraine (Nonveiller et al. 1999, Růžička 2000, Perreau 2004).

The only published record from Slovakia (and several records from adjacent parts of Hungary) are reviewed and mapped by Růžička (2000): Slavec – Gombasek (7488). Second known record from Slovakia (Fig. 6).

Ecology. Unknown, pattern of distribution is mostly associated with karst regions (Růžička 2000).



Figs 7–13. Habitus dorsally (body length in brackets): 7 – *Anemadus strigosus strigosus* (Kraatz) (3.2 mm), 8 – *Catops nigricantoides* Reitter (4.9 mm), 9 – *Catops ventricosus rotundatus* Szymczakowski (4.3 mm), 10 – *Dreposcia umbrina* (Erichson) (4.3 mm), 11 – *Eocatops pelopis pelopis* (Reitter) (3.7 mm), 12 – *Nemadus (Nemadus) colonoides* (Kraatz) (1.8 mm), 13 – *Ptomaphagus (Merodiscus) validus* (Kraatz) (6.7 mm).

Obr. 7–13. Habitus dorzálně (v závorce délka těla): 7 – *Anemadus strigosus strigosus* (Kraatz) (3,2 mm), 8 – *Catops nigricantoides* Reitter (4,9 mm), 9 – *Catops ventricosus rotundatus* Szymczakowski (4,3 mm), 10 – *Dreposcia umbrina* (Erichson) (4,3 mm), 11 – *Eocatops pelopis pelopis* (Reitter) (3,7 mm), 12 – *Nemadus (Nemadus) colonoides* (Kraatz) (1,8 mm), 13 – *Ptomaphagus (Merodiscus) validus* (Kraatz) (6,7 mm).

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SOUHRN

Práce shrnuje publikované i nepublikované údaje o rozšíření sedmi vzácněji nalézáných druhů práchnivců (Coleoptera: Leiodidae: Cholevinae) na Slovensku. Jedná se o druhy *Ane-madus strigosus strigosus* (Kraatz, 1852), *Catops nigricantoides* Reitter, 1901, *C. ventricosus rotundatus* Szymczakowski, 1963, *Dreposcia umbrina* (Erichson, 1837), *Eocatops pelopis pelopis* (Reitter, 1884), *Nemadus (Nemadus) colonoides* (Kraatz, 1851) a *Ptomaphagus (Merodiscus) validus* (Kraatz, 1852). Shrnuty jsou také poznatky o jejich ekologii, jejich rozšíření na Slovensku je zobrazeno ve faunistických síťových mapách.