

**Interesting records of two small carrion beetles  
(Coleoptera: Leiodidae: Cholevinae) from Hungary**

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**Abstract** – *Cholevinus pallidus rufus* (Kraatz, 1870), found in a red fox den entrance is reported for the first time from Hungary. *Choleva (Choleva) lederiana pilisensis* Růžička et Vávra, 2003, an endemic subspecies from Hungary, is reported from additional localities in Pilis Mts and Buda Hills. With 5 figures.

**Key words** – Cavernicolous, *Choleva*, *Cholevinus*, faunistics, new record, pholeophily

## INTRODUCTION

Small carrion beetles (Leiodidae: Cholevinae) have recently 45 known species in Hungary (MERKL *et al.* 2012, PERREAU 2015). Most of the species are necrophagous, but some more specialized species are inquilines in nests and tunnels of small mammals (pholeophiles), others are associated with ants, and some others are associated with hypogean environments (PECK 2001). Here we present records of two such species – one is represented by its first record for Hungary, the other is an endemic Hungarian subspecies, and we expand its known localities, based on recently collected specimens.

*Abbreviations* – CJR = collection of Jan Růžička (Praha, Czech Republic); HNHM = Hungarian Natural History Museum, Coleoptera Collection (Budapest, Hungary; curator: Ottó Merkl).

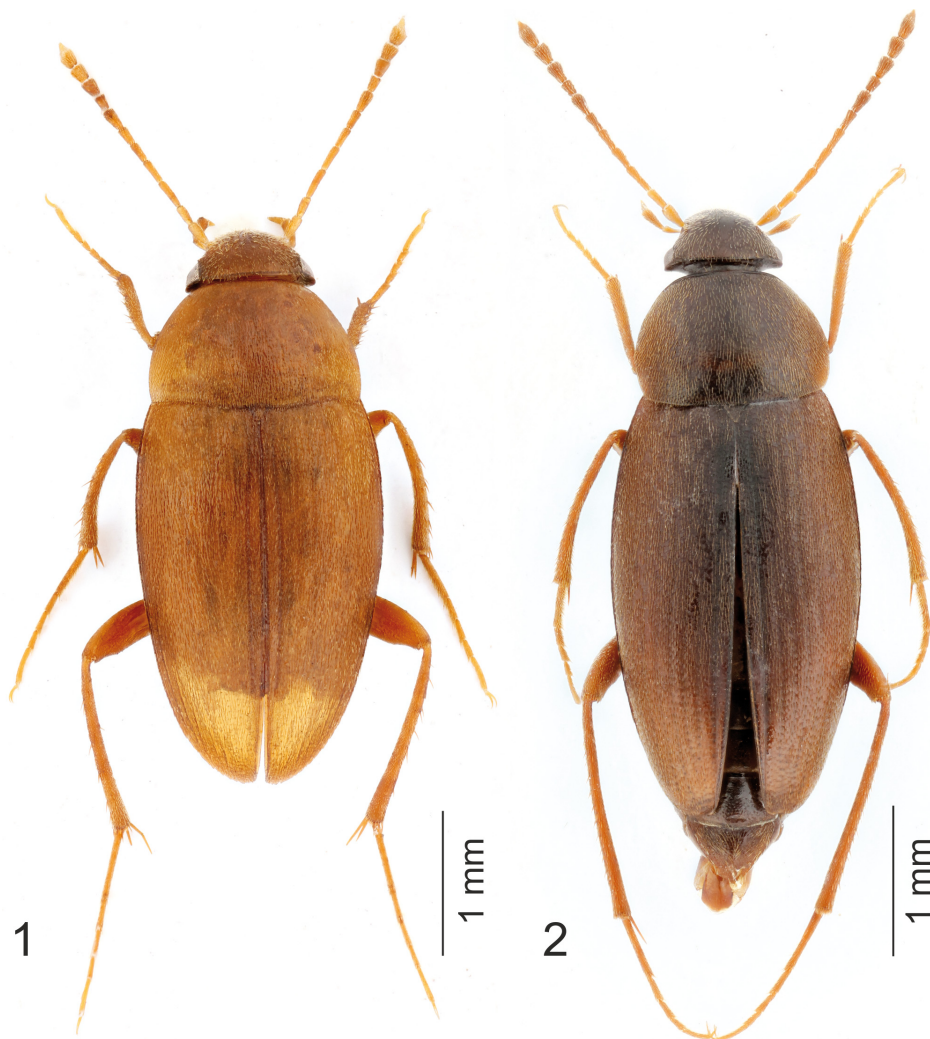
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*Cholevinus pallidus rufus* (Kraatz, 1870)

(Figs 1, 3–4)

*Material examined* – Hungary: Fejér county, Gánt, Köves-völgy [47.4043°N 18.3821°E], tölgyes [= oak forest], rókaodúból [= from fox den], 24.IV.2010, leg. A. Kotán, R. Kunderata, T. Németh & V. Kubeček (1 male, 1 female, HNHM). Identified by J. Růžička.



**Figs 1–2.** Habitus in dorsal view, 1 = *Cholevinus pallidus rufus* (Kraatz, 1870), female from Čejč env., Czech Republic, 2 = *Choleva (Choleva) lederiana pilisensis* Růžička et Vávra, 2003, female from Solymári-ördöglyuk, Hungary

*Habitat* – Collected in the entrance of a red fox (*Vulpes vulpes* (Linnaeus, 1758)) den (Fig. 3), together with another pholeophilous beetle species, *Trox eversmannii* Krynicky, 1832 (Trogidae). In Moravia, repeatedly reported from burrows of rabbits (*Oryctolagus cuniculus* (Linnaeus, 1758)) on sandy soil; in Slovakia, once found in a den of red fox in a forest with loess soil (RŮŽIČKA 1993, J. RŮŽIČKA unpublished). In Moravia, mostly collected in spring (March to June, with majority of records in April), and with two records also from October (RŮŽIČKA 1993, J. RŮŽIČKA unpublished).

*Distribution* – *Cholevinus pallidus rufus* is known from several records in southern Europe in Spain, Italy (Sicily) and Romania, and in northern Africa in Algeria, Egypt, Morocco and Tunisia (PERREAU 2015). In Central Europe, it is known only from three localities: one locality (with repeated records) from southern Moravia (Čejč env., Špidlárky Nature Reserve, ca. 48.925°N, 16.978°E), and two single records from Slovakia (Štúrovo, ca. 47.82°N, 18.65°E; Vinohrady nad Váhom, ca. 48.31°N, 17.75°E) (GOTTWALD 1982, RŮŽIČKA 1993). First record from Hungary, and fourth known locality in Central Europe (Fig. 4).



Fig. 3. Entrance of the red fox den, collecting site of *Cholevinus pallidus rufus* (Kraatz, 1870) at Gánt, Hungary

*Choleva (Choleva) lederiana pilisensis* Růžička et Vávra, 2003  
(Figs 2, 5)

*Material examined* – Hungary: Komárom-Esztergom county: Pilis Mts, Klastrompuszta, Ajándék-barlang [= cave, ca. 47.700°N, 18.847°E], 40 m [from the entrance], 2.X.2011, leg. D. Angyal (1 male, HNHM); Kesztlőc, Leány-barlang [= cave, ca. 47.700°N, 18.844°E], Cseppköves-terem alatt, [= under hall], 8.X.2011, leg. D. Angyal (1 female, HNHM); same locality, Cseppkő-fal [= wall], 31.III.2012, leg. D. Angyal & L. Dányi (1 male, HNHM); same data, Hangyás-ág [= side branch] (1 male, 1 female, HNHM); same data, Nagy-terem [= hall] (2 males, HNHM); same data, Kis-(Bejárati)-terem [= hall] (3 females, HNHM); Pest county: Solymár, Solymári-ördöglyuk [= devil's hole, ca. 47.590°N, 18.906°E], ITE-ág [= side branch], Sasszárny, falról [= from wall], 3.III.2012, leg. D. Angyal (1 male, 1 female, HNHM; 1 female, CJR). All specimens were identified by J. RŮŽIČKA.

*Habitat* – Individually collected and pitfall-trapped in limestone caves in the Pilis Mts (RŮŽIČKA & VÁVRA 2003).

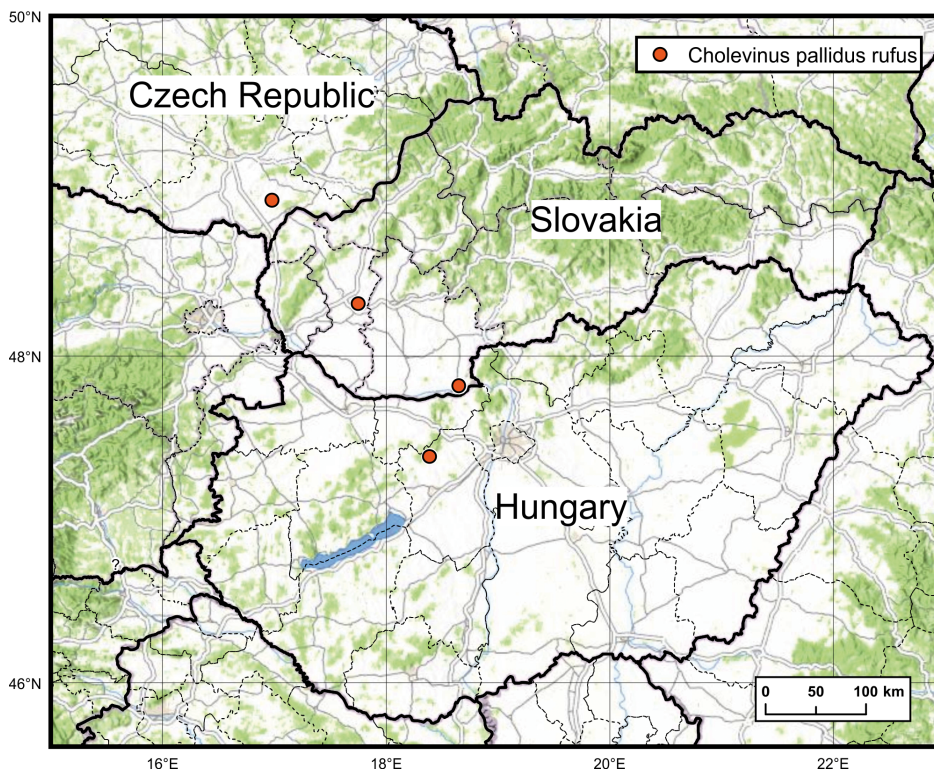


Fig. 4. Distribution of *Cholevinus pallidus rufus* (Kraatz, 1870) in Central Europe

*Distribution* – *Choleva lederiana* Reitter, 1902 is a polytypic species, distributed through Europe to Altai Mts. (RŮŽIČKA & VÁVRA 2003, PERREAU 2015). In Central Europe, five subspecies are differentiated from several isolated cave systems in Germany, Poland and Hungary. *Choleva l. pilisensis* was described from several caves in the Pilis Mts (RŮŽIČKA & VÁVRA 2003), i.e., Legény Cave, Leány Cave, Szopláki-ördöglyuk [= devil's hole, ca. 47.708°N 18.875°E] and the “Pilis Szt Kereszt barlang” (which is equivalent of the Szopláki-ördöglyuk). Legény and Leány Caves are parts of the Ariadne Cave System, which is the third longest cave in Hungary and the fourth in vertical extension (15,100 and 204 m, respectively, see National Cave Record Keeping, [www.termeszetvedelem.hu/index.php?pg=cave\\_4840-1](http://www.termeszetvedelem.hu/index.php?pg=cave_4840-1)).

Of the additional two localities of this subspecies, Ajándék Cave is still regarded as a separate cave, but a gas tracing research proved the connection between the Ajándék Cave and the Ariadne Cave System (pers. comm. by Gergely Surányi, MTA-ELTE Research Group of Geology, Geophysics and Space Sciences, Budapest). Speleologists often claim that these caves are located in the area of the

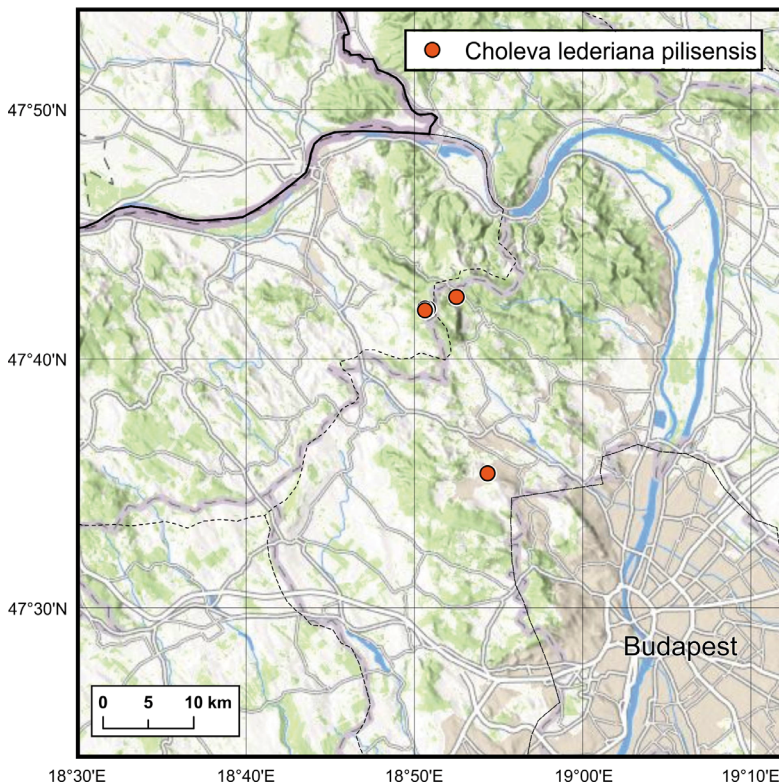


Fig. 5. Distribution of *Choleva (Choleva) lederiana pilisensis* Růžička et Vávra, 2003 in Hungary

village of Keszölc. That is what one can see on the locality labels, too. The reason is that the easiest access to the caves is from the direction of Keszölc. However, in reality they are actually located within the administrative boundaries of the city of Esztergom.

The other new locality (Solymári-ördöglyuk) is in the Buda Hills, ca. 13 km SSE of the cluster of the other known localities in the Pilis Mts (Fig. 5).

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