

***Cecilioides petitiana* in Slovakia – a second record after more than 60 years**

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Cecilioides petitiana (Benoit, 1862), like the other Blind snails, is a subterranean blind snail with a colourless needle-shaped shell. Apart from the other cecilioids, it has a very peculiar distribution. *Cecilioides petitiana* is most probably a Mediterranean species (KERNEY et al. 1983), which in Central Europe can only be found at six isolated sites in Hungary (PINTÉR et al. 1979). It was also found in south Slovakia by Endre Dudich at one site in Tekovské Lužany (LOŽEK 1964). This record was formerly published by Soós (1943) who used the Hungarian name, Nagysaló, for this site. E. Dudich (1895–1971) was a professor of Zoology in Hungary (Eötvös Loránd University, Budapest); however, he was born in Slovakia in Tekovské Lužany. He found *C. petitiana* in the garden of his natal house, probably during the period between the First and Second World War (V. LOŽEK, pers. comm.). Since then, no further records of this species have been reported from Slovakia, and the occurrence of this subterranean snail was a bit mysterious. In the most recent Red-list of Slovakian molluscs the species was classified as “extinct” (ŠTEFFEK 1994). In the summer of 2007, during a survey on the urban snail fauna of Bratislava, we found one fresh, adult shell (Fig. 1). The shell was found under a stone in a dooryard of apartments in the city centre (48°08'57.1" N, 17°07'28.3" E, Karadžičova Str., 14 Jul 2007, M. Horsák & T. Čejka lgt.). The dooryards were treeless and dry, with lawns and beds of different exotic foliage plant species (e.g. *Bassia scoparia*, *Commelina communis*, *Lobularia maritima*, *Oxalis fontana*).

The origin of a Central European metapopulation of *C. petitiana* is still dubious, because it is not known whether the specimens are truly identical with the type populations from Sicily. It is obvious that the sites in Hungary and Slovakia are results of modern spreading, probably associated with human activities (e.g. in soil with exotic plants). A similar pattern of recent distribution is known for the Mediterranean *Oxychilus hydatinus* (Rossmässler, 1838) that also lives subterranean. The northern most occurrences of this snail were known from a few isolated sites in south Hungary (KERNEY et al. 1983). Recently, it was documented from more sites in south Hungary and also from two isolated urban sites in Slovakia, which extent known species distribution northwards (DVOŘÁK et al. 2004).

At first glance the shell of *C. petitiana* is very similar with that of the more common species *C. acicula*. The shell height of both species is approximately up to 5.5 mm but the shell width of *C. petitiana* is larger (up to 1.7 mm) than that of *C. acicula* (up to 1.2 mm). Other conchological differences are in the depth of the suture (*C. acicula* has a somewhat deeper suture), in the height of the last whorl (*C. petitiana* has a markedly higher and conspicuous last whorl), and in the shape and height of the shell opening (compare at Fig. 1).



Fig. 1. The shell of *Cecilioides petitiana* from the City of Bratislava; height = 4.42 mm, width = 1.38 mm (left) and the shell of *Cecilioides acicula* from the south Czech Republic; height = 4.17 mm, width = 1.15 mm (right).

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References

- DVOŘÁK L., HORSÁK M. & VARGA A., 2004: *Oxychilus (Mediterranea) hydatinus* (Gastropoda: Zonitidae) new for Slovakia with notes on its distribution in Hungary. – *Folia Malacologica*, 12(3): 149–152.
- KERNEY M.P., CAMERON R.A.D. & JUNGBLUTH J.H., 1983: *Die Landschnecken Nord- und Mitteleuropas*. – Verlag Paul Parey, Hamburg und Berlin, 384 pp.
- LOŽEK V., 1964: Quartärmollusken der Tschechoslowakei. – *Rozpravy Ústředního ústavu geologického*, Vol. 31. ČSAV, Praha, 374 pp.
- PINTÉR L., RICHNOVSZKY A. & SZIGETHY A., 1979: A magyarországi recens puhatestűek elterjedése. – *Soosiana*, Suppl. 1: 1–351.
- SOÓS L., 1943: A Kárpát-medence Mollusca-faunája. – *Akadémiai Kiadó*, Budapest, 478 pp.
- ŠTEFFEK J., 1994: Current status of the molluscs of Slovakia in relation to their exposure to danger. – *Biológia*, Bratislava, 49: 651–655.