

Misidentification of a snake responsible for an erroneous locality for *Dolichophis caspius* (Ophidia: Colubridae) in Hungary – a case resolved

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Abstract: For 24 years, a dubious locality record for *Dolichophis caspius* in Hungary has persisted in the literature. Re-examination of the voucher specimen preserved in the Mátra Museum of the Hungarian Natural History Museum, Gyöngyös, revealed that it is a *Zamenis longissimus*. The Zselic in southwestern Hungary, where the snake was found should no longer be considered as part of the distribution range of *D. caspius*.

Dolichophis (Coluber) caspius (Gmelin, 1789) is a widespread colubrid snake in southeastern Europe and western Asia (KREINER 2007). It reaches its northernmost and westernmost distribution in Hungary. Here, only a few small isolated populations have survived to date (DELY 1997, HERCZEG et al. 2002, KORSÓS et al. 2002, BABOCSAY & VÁGI 2012, BELLAAGH 2012). Until recently, this snake was known only from dolomite outcrops in the vicinity of Budapest and from the calcareous Szársomlyó Hill in southern Hungary (DELY 1978, 1997, KORSÓS et al. 2002, TÓTH 2002, KORSÓS 2007, NAGY et al. 2010, BELLAAGH 2012). Between 2003 and 2006 three new populations were discovered on steppe vegetation growing on loess walls along the western bank of the Danube River, far from, but between the known northern and southern localities (KORSÓS et al. 2002, BELLAAGH et al. 2008). These new discoveries had shed light on the past distribution of this species in Hungary, indicating a possible route of its northward colonization (KORSÓS et al. 2002, BELLAAGH et al. 2006). Discovery of new localities of *D. caspius* in Hungary is therefore of paramount importance in the recovery of the past distribution of this species (KORSÓS et al. 2002, KORSÓS 2007, NAGY et al. 2010) and to plan conservation actions (BELLAAGH 2012). Preceding the central Hungarian discoveries, along with two other (Bükk Mts. – LUKÁCS 1956 and Mecsek Mts. – REUTER 1941, the latter one discussed by TRÓCSÁNYI et al. 2007) dubious locality records, *D. caspius* was reported also from the vicinity of Bőszénfa, Zselic in southwestern Hungary (KEREK & VARGA 1989). This report was based on a voucher specimen that Varga A. captured and deposited in the herpetological collection (coll. no.: MM 90.3.8.) of the Mátra Museum, Gyöngyös, Hungary (now an affiliation to the Hungarian Natural History Museum, Budapest). Interestingly, the specimen has never been examined by subsequent authors and its locality of collection perpetuated as a dubious locality for *D. caspius*. Although DELY (1997) argued that the specimen could possibly be a released captive specimen of *D. caspius* (in 1998, MARIÁN got to a similar conclusion), because it was captured on loess that at Bőszénfa supports lush forested vegetation foreign to *D. caspius*, the discoveries of the populations on loess along the western bank of the Danube River made the locality in the Zselic somewhat exciting and feasible. However, as recently appointed curator to the vertebrate collection at the Mátra Museum, I examined the specimen, and it turned out to be a male *Zamenis (Elaphe) longissimus* (Figs 1–2). This case is a good example why voucher specimens are valuable, and that scientific

Fig. 1. The male *Zamenis (Elaphe) longissimus* specimen misidentified as *Dolichophis (Coluber) caspius*. Total length: 143 cm. Collection number: MM 90.3.8. Habitus. Note the narrow light grey streaks on the scale edges (conspicuous where the snout points to) on the almost uniformly brown body, characteristic to *Z. longissimus*



Fig. 2. The male *Zamenis (Elaphe) longissimus* specimen misidentified as *Dolichophis (Coluber) caspius*. Head (damaged). Note the conspicuous light (yellow) temporal blotches characteristic to *Z. longissimus*

collections are tremendously important sources for studying and documenting biodiversity (BABOCSAY et al. 2006). Preserved specimens deposited in public collections easily accessible by the scientific community, can be re-examined again and again and analysed with new methods or simply re-examined with more experienced eyes. In case of rare species the information coupled with preserved individuals may help to draw exact distribution ranges (BABOCSAY 2010), especially when current information inflow, due to poor data collection activity, is weak. In this case a specimen that brought a perplexing locality record for *D. caspius* in Hungary, eventually, as a voucher specimen, helped to clarify the uncertainty it made: the Zselic can be dropped as part of the distribution range of *D. caspius*.

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