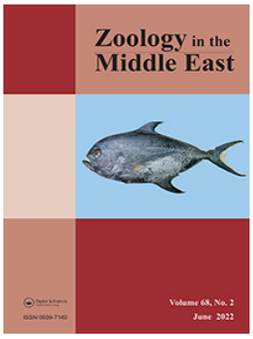

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SHORT COMMUNICATION

First record of the colubrid snake *Platyceps ventromaculatus* (Reptilia: Colubridae) for Afghanistan

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The diversity of the family Colubridae in Afghanistan is rich, especially on the genus level. Among them the genus *Platyceps* Blyth, 1860 is represented by three species, *Platyceps karelini* (Brandt, 1838), *P. mintonorum* (Mertens, 1969) and *P. rhodorachis* (Jan in de Filippi, 1865) (Wagner et al., 2016). Although identification of these snakes is not always unambiguous, based on the current knowledge it seems that *P. karelini* and *P. rhodorachis* are widely distributed and recorded in the south as well as north of the Hindu Kush Mts., while *P. mintonorum* is known only from southwestern part of Afghanistan (Schätti et al., 2014; Wagner et al., 2016; Jablonski et al., 2019). These snakes belong, together with *P. ventromaculatus* (Gray, 1834), to the so called *rhodorachis-ventromaculatus* evolutionary lineage (species group) distributed mainly in the Palaearctic (Schätti et al., 2014). However, the taxonomy of these snakes is not well resolved and a wide-range molecular study that could supplement previous morphological and distributional reviews (Schätti et al., 2012; 2014), is warranting. For example, Khan (2006) considers *P. mintonorum* as a different phenotype of *P. karelini*, whereas Schätti et al. (2014) provides evidence for its valid species status. All these snakes were previously subject of morphological and taxonomical investigations and were often misidentified, probably also due to possible mutual hybridization events (see the reviews of Schätti and Schmitz, 2006, and Schätti et al., 2014).

Platyceps ventromaculatus is distributed from the Makran coast in Pakistan to as far west as the border area with Iran to Pakistani Punjab, east to the Uttar Pradesh, and south to Maharashtra in India (Schätti & Schmitz, 2006; Schätti et al., 2014). In Pakistan, this species is found at the foothills of the northern Punjab hills (Khan, 1997) and Sindh. Although some of authors mentioned this species from range-wide area of the Middle East and Anatolia (e.g., Yıldız, 2011; Şahin et al., 2020), such species affiliation is probably not correct. We here follow extensive morphological and distribution review of Schätti and Schmitz (2006: 758) and Schätti et al. (2014: 375.) as a base to present the first documented record of *P. ventromaculatus* from Afghanistan confirmed by collected specimen. According to Wagner et al. (2016), several authors mentioned this species (without any details) from Afghanistan (Boulenger, 1890; Leviton, 1959) but Schätti et al. (2014) considered that all these records belong to *P. rhodorachis*. Thus, our record represents an important extension for the species distribution in the north part of its range and the first verified record for Afghanistan.

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Figure 1. Distributional record of *Platyceps ventromaculatus* for Afghanistan (Darin District in the Kunar Province; red circle). White circles represent geographically closest records of the species in Pakistan: 1- Makarwal, 2- Jhelum (Schätti & Schmitz, 2006).

On 9 May 2020, a dead snake was collected, probably killed by the local people, in Darin village of the Darin District in the Kunar Province, north-eastern Afghanistan (35.2149°N, 71.3712°E, ~1300 m a. s. l.; Figure 1). The snake was found at the foothills of the rugged mountainous terrain, close to the human settlement. The specimen was a subadult female, approximately 600 mm long. The specimen was not well preserved and due to decomposition processes only the head part was usable for further morphological investigations (Figure S1). It is now fixed in 70% ethanol under the collection number DJ10174 in the herpetological collection of the Department of Zoology, Comenius University in Bratislava, Slovakia. The specimen was readily discernible as *P ventromaculatus* on the basis of a nuchal streak and bearing dorsal colour pattern along entire trunk. The basic head scalation is as follow (Figure S1): rostral slightly broader than high; internasals slightly shorter than prefrontals; frontal longer than broad; posterior border of parietals forming an obtuse (concave) angle; loreal longer than high, situated on the posterior portion of the second and the third supralabial; preocular single, in contact with frontal; anterior subocular single and smaller than loreal; nine supralabials, fifth and sixth entering eye, the last three largest; two postoculars, upper slightly larger; two anterior temporals and three scales in second row; lower anterior temporal larger; ten infralabials, four in contact with first inframaxillar, sixth largest; anterior pair of chin shields a little shorter and broader than posterior; posterior chin shields in front separated by two rows of somewhat large scales; gulars in five oblique rows between the posterior chin shields and the first ventral. These data correspond with species characteristics of populations from Pakistan provided by Khan (1997).

Schätti and Schmitz (2006) mentioned the northernmost record of the species in Pakistan from Makarwal (32.883°N, 71.150°E; west part of the Indus River) and Jhelum (32.933°N, 73.733°E; east part of the Indus River). From the former locality, our record represents approximate 250 km range extension to the north, following possible colonization of this part of Afghanistan from Pakistan via Kabul and Kunar River Valleys. Presence of several snake species with their northern border distribution in eastern Af-

ghanistan (e.g., Nangarhar Province), is known for *Oligodon arnensis* (Shaw, 1802), *Fowlea piscator* (Schneider, 1799), *Psammophis leithii* Günther, 1869, or *Myriopholis blanfordi* (Boulenger, 1890) (Wagner et al., 2016 and discussion in Jablonski et al., 2021). The present record constitutes the first for Afghanistan and support the hypothesis that cross-border river valleys are used as colonization routes.

Supplementary Material

Supplementary Figure (S1) is given as a Supplementary Annex, which is available via the "Supplementary" tab on the article's online page.

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Disclosure Statement

No potential conflict of interest was reported by the authors.

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Supplementary Material to:

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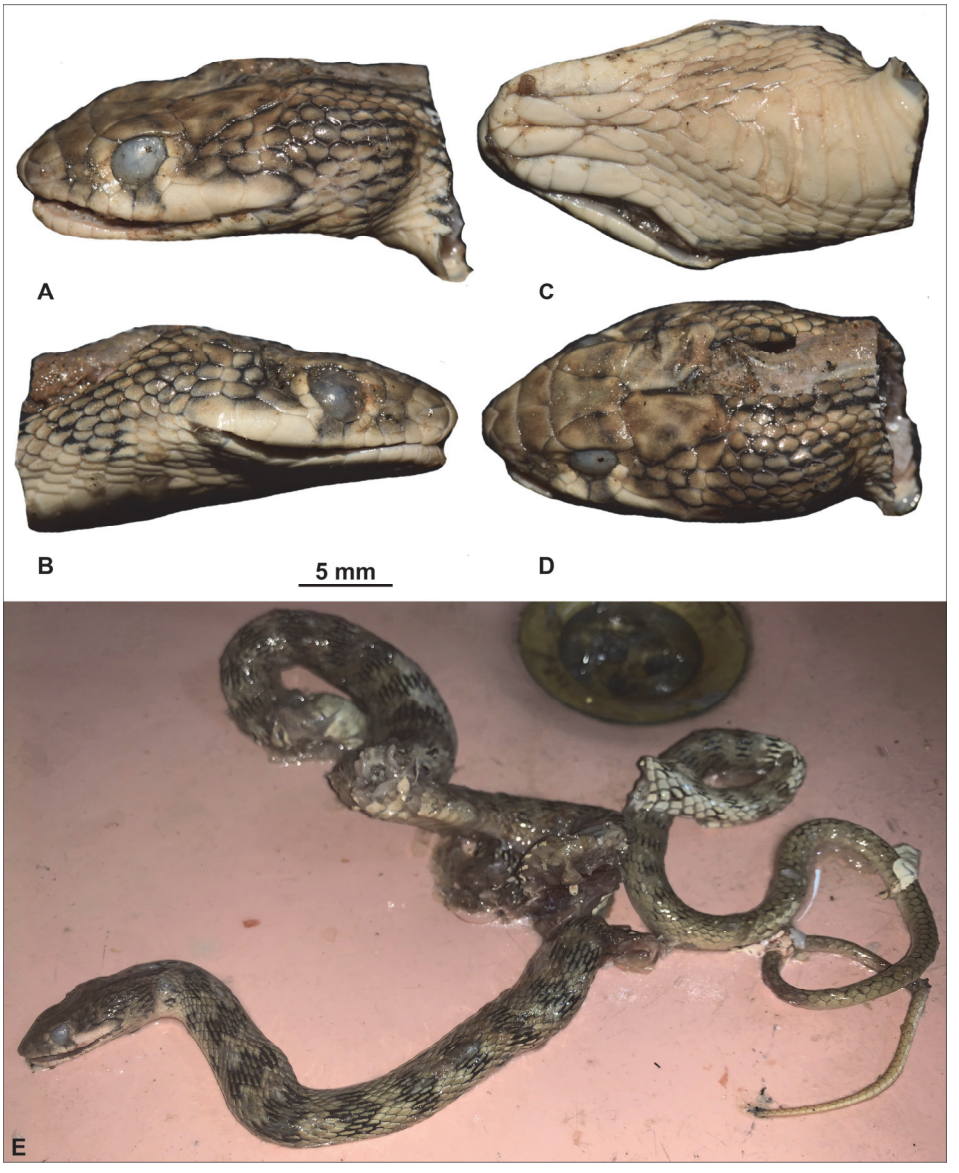

Figure S1. The collected specimen of *Platyceps ventromaculatus* from Afghanistan. A-D: head of the specimen from different views; E: total view on the body.