

A NEW RECORD OF *DEROCERAS LAEVE* (O. F. MÜLLER, 1774) FROM PAKISTAN (GASTROPODA: PULMONATA: AGRIOLIMACIDAE)

JAROSLAV Č. HLAVÁČ

Institute of Geology, Academy of Sciences of the Czech Republic, Laboratory of Environmental Geology, Rozvojová 135, CZ-16502 Praha, Czech Republic (e-mail: jhlavac@gli.cas.cz)

ABSTRACT: In 2001 the slug *Deroceras laeve* was found in northern Pakistan: Duikar village, Gilgit District, FANA. The new record, the highest located in Karakoram, is an extension of its continuous distribution in the mid Hunza river region.

KEY WORDS: Gastropoda, Deroceras laeve, Pakistan, distribution

INTRODUCTION

The terrestrial mollusc fauna of Pakistan was poorly known in the past, and terrestrial slugs in particular were often ignored in biological surveys and field studies (AUFFENBERG 1997, WIKTOR & AUFFENBERG 2002). Consequently, the knowledge of the diversity and distribution of slugs in this country is still very poor. The 1990–1992 field survey provided a few records of two slugs, *Anadenus altivagus* (Theobald, 1862) and *Deroceras laeve* (O. F. Müller, 1774), and a single one of *Candaharia rutellum* (Hutton, 1849) (WIKTOR & AUFFENBERG 2002). During the 2001 malacological survey, which focused on the northern parts of Pakistan (Karakoram, Hindukush), *Deroceras laeve* was found in the mid Hunza river region, Gilgit District, Federally Administered Northern Areas (FANA). The specimens were collected by J. Č. HLAVÁČ, head of the survey under the auspices of the Institute of Geology, Academy of Sciences of the Czech Republic.

MATERIAL EXAMINED

JH-3: Pakistan, FANA, Gilgit District: Duikar village (by Altit), 36°19'11.40''N, 74°42'12.40''E, 2,940 m a.s.l., under stones along a dirt road in the village,

DISTRIBUTION IN PAKISTAN

The currently known distribution of *Deroceras laeve* in Pakistan (Fig. 1) is disjunct (WIKTOR & AUFFEN-BERG 2002). Isolated localities occur in Quetta and in the vicinity of Ziarat, north-western Baluchistan, while rather humid grassy to semi-open habitat with several *Populus*-trees, 5 September 2001, 6 ex., lgt. et coll. J. HLAVÁČ, det. anatom. A. WIKTOR.

the majority of records are concentrated in the mountains of the northern parts of Pakistan: The North-West Frontier Province (NWFP) and Federally Administered Northern Areas (FANA) – Abbottabad, Swat, Dir, Chitral, Gilgit and Skardu Districts. The species is apparently absent from the savannas of central and southern Pakistan.

The new site is located in the mid Hunza river region, in Duikar village, which is the northernmost occurrence in all Pakistan at present (Fig. 1). *Deroceras laeve* lives there under stones along a dirt road within the village. The site, with its grassy to semi-open habitat with several *Populus*-trees, is rather humid due to the presence of a small man-made channel trapping water from the Ultar Glacier. This altitude is 2,940 m a.s.l., which is the highest-situated site of *Deroceras laeve* in Karakoram. The currently known highestlocated record of this species in the country (3,100 m a.s.l.) is Matitlan village near Kalam, Swat District, NWFP (WIKTOR & AUFFENBERG 2002).

The new record of *Deroceras laeve* is an extension of its continuous distribution in the mid Hunza river region, with its numerous earlier records from the vicinity of Karimabad and Gilgit (WIKTOR & AUFFENBERG 2002).

ACKNOWLEDGEMENTS

This work was funded by the scientific project of the Institute of Geology, Academy of Sciences of the Czech Republic No. CEZ: Z3-013-912. I also convey

REFERENCES

AUFFENBERG K. 1997. The biogeography of the land snails of Pakistan. In: Biodiversity of Pakistan (MUFTI S. A., WOODS C. A., HASAN S. A., eds.), pp. 253–275. Pakistan Museum of Natural History, Islamabad and Florida Museum of Natural History, Gainesville.

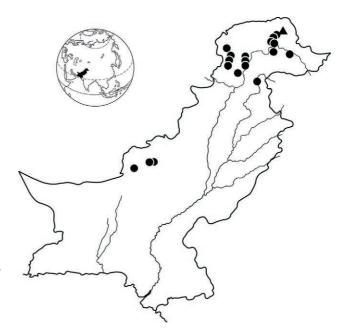


Fig. 1. Recent distribution of *Deroceras laeve* in Pakistan (from WIKTOR & AUFFENBERG 2002, supplemented by new data – triangle)

my appreciation to ANDRZEJ WIKTOR, Director of the Museum of Natural History, Wrocław University, for the anatomical identification of the specimen.

WIKTOR A., AUFFENBERG K. 2002. Contribution to the knowledge of the terrestrial slugs of Pakistan. Folia Malacol. 10: 9–15.

Received: May 20th, 2004 Accepted: July 3rd, 2004