

PARTIAL MELANISM IN THE GRASS SNAKE *Natrix natrix* (REPTILIA: COLUBRIDAE) FROM NORTHEASTERN SLOVAKIA

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Abstract: Partially melanic specimen of the grass snake *Natrix natrix* (Linnaeus, 1758) from the Eastern Carpathians collected for the first time in Slovakia is described in detail. The morphological characters are within the ranges of subspecies *N. n. natrix* reported for Slovakia.

Keywords: *Natrix natrix*, Colubridae, Serpentes, melanism, colour, colour aberration, Slovakia

INTRODUCTION

Melanic individuals of *Natrix natrix* (Linnaeus, 1758) are not rare throughout the range and are found in various subspecies, more often they could be encountered in island populations (for review of the literature see KABISCH 1999). Melanism has no taxonomic value in *N. natrix* (FEJÉRVÁRY-LÁNGH 1944, MERTENS 1947), while it is one of the diagnostic characters of the close relative, however weakly diagnosed species *N. megalcephala* (ORLOV & TUNIJEV 1987, JANDZIK in press). TABORSKY & MLYNARSKY (1962) found melanic grass snakes in Bieszczady, Poland, close to the territory of Slovakia, but so far, the melanism was not reported in *N. natrix* from Slovakia.

MATERIAL AND METHODS

In August 2003, one subadult partially melanic specimen and one normally coloured specimen of a comparable size were collected at the locality Ulič, the Východné Karpaty Mts, northeastern Slovakia (geographic coordinates 48°58'N, 22°25'E; DFS 7000). Other 8 normally coloured subadult and adult individuals were caught, examined and released at the locality. The collected specimens are being kept live at the Department of Zoology, Comenius University and finally will be deposited in the collections of the Slovak National Museum, Bratislava. The metric data were taken to the nearest 1 mm with the use of a measuring tape, except for the head dimensions taken to the nearest 1.0 mm with the use of a Vernier caliper.

DESCRIPTION OF THE MELANIC SPECIMEN

Snout-vent length 493 mm, tail length 103 mm, head length (sagittal distance from the snout tip to the posterior end of the lower jaw) 19.9 mm, head width in its broadest part 11.4 mm, 176 ventral shields, 56 pairs of subcaudals, 19 dorsal scales across the mid-body,

7 right and left labials, 10 right and left sublabials, 1 preocular and 3 postoculars on each side of the head, anal shield divided. The head is dorsally black, the lateral side is black with black and white preocular, nasal, frenal and two lower postocular plates. The labials are white with broad black posterior borders, sublabials are white with only slightly indicated black links between each other. The semilunar collar markings are distinct and the comprising scales are white with black posterior thirds. The tongue and the iris are entirely black and there is no lighter rim around the pupil. The throat is white. There are no relief structures on the head shields and the sutures between them are well-marked. The dorsal side of the body and tail is uniformly black, but the ventralmost row of the dorsal scales is finely greyish marbled. Except for the first several ventral plates which are white in colour, the underside of the anterior half of the body is black, chequered with white spots on the edges of the ventral plates. The spots become dark marbled and only slightly visible in the posterior half of the body. The underside of the tail is uniformly black. The dorsal body scales are keeled except for the two smooth outermost rows. Only the anterior part of the tail, 2-3 cm in length, is covered in keeled dorsal scales, the remaining scales are smooth.

DISCUSSION

The metric and meristic data of the melanic specimen are within the ranges characterizing the populations of the grass snake in Slovakia (LÁČ 1968, KMINIAK & KALÚZ 1983, REHÁK 1992) and the subspecies *N. n. natrix* in general (MERTENS 1947), and this refers to the another collected and observed individuals from the same locality as well.



Fig. 1. Comparison of the coloration of the melanic and normally coloured specimen of *N. natrix* from Ulič.

The collar markings are white in colour, although they were yellow in all of the normally coloured specimens at the same locality. They are distinct and good visible in contrast to the individuals found by TABORSKI & MLYNARSKY (1962) which were uniformly black dorsally. This might be due to smaller size of the snake, however, and the markings would presumably darken during the ontogeny. The same differences in coloration between a large and a small specimen mentioned FEJÉRVÁRY-LÁNGH (1942). Melanic specimens of *N. natrix* described by TABORSKI & MLYNARSKY (1962) were collected in Bieszczady in Poland from localities not very far from that one in Ulič and this might indicate the continuous occurrence in this region, although in low rates presumably.

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