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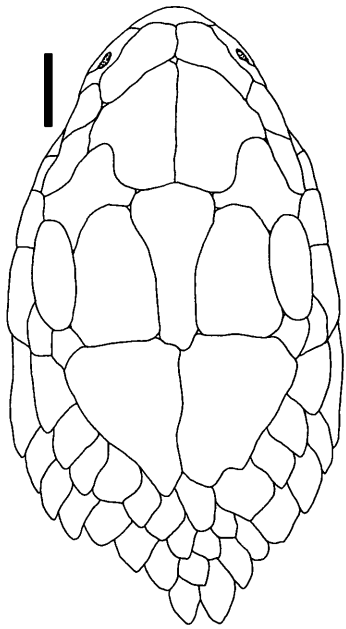

Fig. 2. Head scalation of *Malpolon monspessulanus* (SMF 86351), drawn from the snake slough. Scale bar = 5 mm.

institut und Naturmuseum Senckenberg, Frankfurt a. M., Germany. It is a complete and intact skin shedding with a total length of 181 cm (snout-vent length 143.5 cm) with the following pholidotic characteristics: two loreal scales; one large preocular scale that reaches on top of head; a very elongate frontal scale (Fig. 2); 169 ventral scales; 84 pairs of subcaudal scales; dorsal scales concave, arranged in 19 longitudinal rows at midbody and in 16 one head length anterior to the cloaca. Considering that the longitudinal extension of complete sloughs usually surpasses the length of the live animals by 10-20% this snake actually had a total length of about 150-165 cm. These data agree well with published data on the morphology of *M. monspessulanus* (HAAN 1999) and exclude any other species of snake from consideration. Three other species of snakes have been reported from Corsica (GASC et al. 1997): *Coluber viridiflavus* LACÉPÈDE, 1789; *Natrix maura* (LINNAEUS, 1758); and *Natrix natrix* (LINNAEUS, 1758).

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KEY WORDS: Reptilia: Squamata: Serpentes: Colubridae: *Malpolon monspessulanus*; Corsica; France distribution; first record, new island record

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Morphology and distribution of *Rhynchocalamus melanocephalus satunini* (NIKOLSKY, 1899) in Turkey

The Middle East genus *Rhynchocalamus* includes three species: *Rhynchocalamus arabicus* SCHMIDT, 1933, Aden Kukri Snake, is only known from Aden (terra typica) in South Yemen (SCHMIDT 1933). *Rhynchocalamus melanocephalus* (JAN, 1862), Palestine Kukri Snake, lives in Egypt, Jordan, Lebanon, Syria, Israel, Iran, Iraq, Armenia, Azerbaijan and Turkey (REED & MARX 1959; DAREVSKY 1970; GASPERETTI 1988; WERNER 1988; LATIFI 1991; LEVITON et al. 1992; ENGELMANN et al. 1993; FRANZEN & BISCHOFF 1995). *Rhynchocalamus melanocephalus satunini* (NIKOLSKY, 1899) was the only representative of the Genus known from Turkey (south and southeast Anatolia – BODENHEIMER 1944; EISELT 1970; BARAN 1976, 1980; BAŞOĞLU & BARAN 1980; BARAN & ATATÜR 1998) until FRANZEN & BISCHOFF (1995) found a specimen of *R. melanocephalus* from 20 km south of Harbiye, Hatay which they assigned to the nominate subspecies *R. m. melanocephalus* (JAN, 1862). Currently a new *Rhynchocalamus* species (*R. barani*) is being described from Amanos Mountain Range, eastern Mediterranean region of Turkey (OLGUN et al. 2007).

The present paper includes the pholidosis characters, morphometric measurements and color-pattern features of four *R.*

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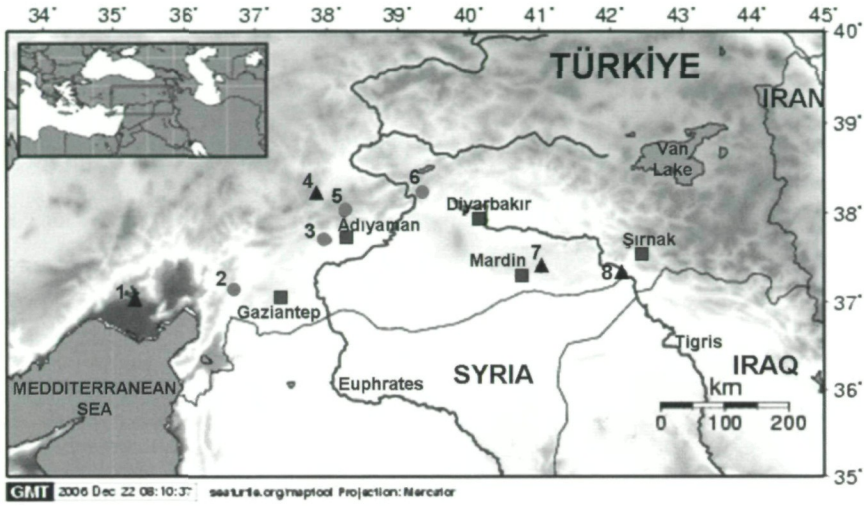

Fig. 1: Distribution of *Rhynchocalamus melanocephalus satunini* (NIKOLSKY, 1899) in southeastern Anatolia, Turkey, showing the known distribution according to the literature (▲), and the new records (●). 1 - Adana, 2 - Nurdağı/Gaziantep, 3 - 4 km W Şambayat/Adıyaman, 4 - 15 km NE Doğanşehir/Malatya, 5 - 3 km S Çelikhan/Adıyaman, 6 - Çüngüş/Diyarbakır, 7 - Çimenlik-Ömerli/Mardin, 8 - 20 km S Cizre/Şırnak. Data from BAŞOĞLU & BARAN (1980) and FRANZEN & BISCHOFF (1995).

Fig. 2: *Rhynchocalamus melanocephalus satunini* (NIKOLSKY, 1899). ZDEU 125/2006 from Nurdağı, Gaziantep, Turkey (dorsal view).

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Table 1: Pholidosis features and morphometric measurements (in mm) of four *Rhynchocalamus melanocephalus satunini* (NIKOLSKY, 1899) specimens captured in southeastern Anatolia. 1 – Sex; 2 – Loreals (left-right; 3 – Preoculars (left-right); 4 – Postoculars (left-right); 5 – Temporals (left-right); 6 – Posttemporals (left-right); 7 – Supralabials (left-right); 8 – Sublabials (left-right); 9 – Gular scales surrounding the last sublabials (left-right); 10 – Gular scales in a row between posterior infralabials; 11 – Dorsal plus temporal scales surrounding the posterior margin of the parietals; 12 – Ventrals; 13 – Longitudinal dorsal scale rows at mid-trunk (between ventrals no. 85-90); 14 – Subcaudals; 15 – Rostrum height; 16 – Rostrum width; 17 – Distance between nostrils; 18 – Diameter of eyes; 19 – Pileus length; 20 – Pileus width; 21 – Head length; 22 – Head width; 23 – Head height; 24 – Supraocular length; 25 – Frontal width; 26 – Frontal length; 27 – Anterior inframaxillar length; 28 – Posterior inframaxillar length; 29 – Snout-vent length; 30 – Tail length; 31 – Internasal triangular (d) or trapezoid-shaped (t); 32 – Suture length of internasal much shorter (—), shorter (-), equal to (=) or longer (+) than prefrontal suture; 33 – Parietals shorter (-), equal to (=) or longer (+) than the distance from posterior tip of rostral to the posterior tip of frontal; 34 – Pairs of lower labials in contact with anterior chin shields.

	ZDEU - Museum Number			
	125/2006	163/2005	169/2005	181/2005
1	Male	Male	Juvenile	Female
2	1/1	1/1	1/1	1/1
3	1/1	1/1	1/1	1/1
4	1/1	1-1	1-1	1-1
5	1/1	1-1	1-1	1-1
6	½	1-1	2-2	1-1
7	7/8	8-7	7-7	7-7
8	8/9	9-8	9-8	8-8
9	10	10	11	11
10	1	1	1	1
11	10	12	10	12
12	205	201	204	215
13	15	15	15	15
14	58	58	64	59
15	1.78	1.84	1.82	1.66
16	2.10	2.18	2.26	2.46
17	2.28	2.00	1.68	2.20
18	1.66	1.20	1.32	1.30
19	7.90	6.84	6.22	6.78
20	3.28	3.38	2.86	3.30
21	9.64	9.48	8.40	8.06
22	5.32	5.04	4.08	4.72
23	2.84	2.78	2.76	3.22
24	0.80	0.72	0.66	0.62
25	2.16	2.20	2.00	2.18
26	2.62	2.48	2.18	2.02
27	2.00	2.00	1.50	1.24
28	1.30	1.16	0.82	0.88
29	341.48	279.28	193.56	276.80
30	68.36	58.46	43.36	56.92
31	d	t	t	d
32	(+)	(—)	(-)	(-)
33	(=)	(=)	(-)	(=)
34	4/4	4/3	4/3	3/3

m. satunini specimens collected from localities outside of the known Turkish range area of *R. m. satunini*. The specimens were captured in southeastern Anatolia in 2005 and 2006 (Fig. 1). They were kept in the Zoology Laboratory of the Department of Biology at the Science and Arts Faculty, Adnan Menderes University and later incorporated into the collection of the Zoology Department, Ege University, Turkey (ZDEU).

Materials: ZDEU 125/2006. 1♂, Nurdağı, Gaziantep, Turkey, 03.05.2006, leg. A. AVCI, C. YILMAZ; ZDEU 163/2005. 1♂, 4 km W of Şambayat, Adıyaman, Turkey, 08.06.2005, leg. İ. BARAN, Y. KUMLUTAŞ, Ç. ILGAZ, A. AVCI; ZDEU 169/2005. 1 juv., 3 km S of Çelikhan, Adıyaman, Turkey, 09.06. 2005, leg. İ. BARAN, Y. KUMLUTAŞ, Ç. ILGAZ, A. AVCI; ZDEU 181/2005. 1♀, Çüngüş, Diyarbakır, Turkey, 11.06. 2005, leg. İ. BARAN, Y. KUMLUTAŞ, Ç. ILGAZ, A. AVCI.

The specimens were fixed in 5% formaldehyde, preserved in 70% ethanol according to BAŞOĞLU & BARAN (1980). Color and pattern characteristics of the specimens were recorded and color slides taken while the specimens were still alive. The ventral plates were counted using DOWLING's (1951) system.

For general aspect, color and pattern features of the specimens see Fig. 2. Body cylindrical; head small, not distinct from neck; eyes small with round pupils; rostral enlarged, extending backwards between internasals; nostril in undivided nasal, loreal present or absent, dorsal scales smooth in 15 rows at mid-trunk (between ventrals no. 85-90); anal and subcaudals divided. The pholidosis characters and morphometric measurements of the specimens are given in table 1. The top of the head is not uniformly black but there are two black blotches and there is a bigger black band across the neck in our specimens. Also the color of the rostral shield and supraoculars is ivory white. The ground color of the dorsum is pinkish without maculation. The black neck band does not reach the ventral scales. The color of the ventral side is more pinkish than the dorsum. Regarding pholidosis characters, morphometric measurements and color-pattern features, the specimens examined in this study are within the variation reported in the literature for *R. m. satunini* (REED &

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Sex	1	2	3	4	5	6	7	8	9	10	11	12	13	Sources
♀	185	31	15	223	61	7	—	1+1	—	1	—	—	—	DAREVSKY, 1970
♂	198	36	15	206	64	7	—	1+1	—	2	—	—	—	DAREVSKY, 1970
♀	364	72	15	232	62	7	—	1+2	—	—	—	—	—	DAREVSKY, 1970
♂	293	62	15	203	57	7	—	1+1	—	—	—	—	—	DAREVSKY, 1970
♀	310	68	15	225	64	7	—	1+2	—	—	—	—	—	DAREVSKY, 1970
—	162	28	15	202	60	?	—	1+1	—	—	—	—	—	WERNER, 1906
	—	—	15	215	59	?	—	1+1	—	—	—	—	—	WERNER, 1917
♀	323	55	15	220	52	7	—	1+1	—	—	—	—	—	REED & MARX, 1959
♀	166	27	15	226	58	7	—	1+1	—	—	—	—	—	REED & MARX, 1959
♂	190	43	15	208	61	7	—	1+1	—	—	—	—	—	EISELT, 1970
♂	159	31	15	219	58	7	—	—	—	—	—	—	—	EISELT, 1970
♀	329	60	15	230	53	7	7/8	—	—	—	d (—)	(-)	4	FRANZEN & BISCHOFF, 1995
♀	159	31	15	222	58	7	8/8	—	—	—	t (-)	(=)	4	FRANZEN & BISCHOFF, 1995
♂	134	28	15	202	60	7	8/8	—	—	—	t (*)	(=)	4	FRANZEN & BISCHOFF, 1995
♂	341.48	68.36	15	205	58	7/8	8/9	1+1	—	—	d (+)	(=)	4	This study
♂	279.28	58.46	15	201	58	8/7	9/8	1+1	—	—	t (—)	(=)	4/3	This study
Juv.	193.56	43.36	15	204	64	7/7	9/8	1+1	—	—	t (-)	(-)	4/3	This study
♀	276.80	56.92	15	215	59	7/7	8/8	1+1	—	—	d (-)	(=)	3	This study

Table 2 (left): Comparison of *Rhynchocalamus melanocephalus satunini* (NIKOLSKY, 1899) specimens examined in the present study with the data given in the literature. 1 – Snout-vent length (mm); 2 – Total length (mm); 3 – Dorsal scales at mid-trunk; 4 – Ventrals; 5 – Subcaudals; 6 – Upper labials; 7 – Lower labials; 8 – Temporals; 9 – Preoculars; 10 – Postoculars; 11 – Internasal triangular (d) or trapezoid shaped (t); length of suture much shorter (—), shorter (-), equal to (=) or longer (+) than prefrontal suture; 12 – parietals shorter (-), equal to (=) or longer (+) than the distance from posterior tip of rostral to posterior tip of frontal; 13 – pairs of lower labials in contact with anterior chin shields; — no data available.

MARX 1959; DAREVSKY 1970; GASPERETTI 1988; EISELT 1970; BARAN 1976; BAŞOĞLU & BARAN 1980; BARAN & ATATÜR 1998; FRANZEN & BISCHOFF 1995; see table 2). The localities reported in this study extend the known range area of *R. m. satunini* in southeastern Anatolia.

The specimens were found among small calcareous stones situated at the edge of a cultivated area and under small stones not far from the water. The time of collecting was between 09:00 – 12:00 at a temperature of 27 to 30°C. The sympatric amphibian and reptile fauna comprised *Rana ridibunda* PALLAS, 1771, *Bufo* (*Pseudepidalea*) *viridis* (LAURENTI, 1768), *Mauremys caspica* (GMELIN, 1774), *Testudo graeca* LINNAEUS, 1758, *Trapelus ruderatus* (OLIVIER, 1805), *Lacerta cappadocica* F. WERNER, 1902, *Lacerta media* LANTZ & CYRÉN, 1920, *Ophisops elegans* MÉNÉTRIÉS, 1832, *Eumeces schneideri* (DAUDIN, 1802), *Mabuya aurata* (LINNAEUS, 1758), *Platyceps najadum* (EICHWALD, 1831), *Eirenis collaris* (MÉNÉTRIÉS, 1832), *Natrix tessellata* (LAURENTI, 1768), *Typhlops vermicularis* MERREM, 1820 and *Leptotyphlops macrorhynchus* (JAN, 1862).

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KEY WORDS: Reptilia: Squamata: Ophidia: Colubridae: *Rhynchocalamus melanocephalus satunini*, morphology, pholidosis, distribution, Türkiye

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First record of the snake *Dendrophidion bivittatus* (DUMÉRIL, BIBRON & DUMÉRIL, 1854) and taxonomic remarks on the Genus in Ecuador

The Genus *Dendrophidion* FITZINGER, 1843 includes fast moving snakes of medium size and diurnal activity. At present, this genus is constituted by eight species distributed from Mexico over Middle America to northern South America (PETERS & OREJAS-MIRANDA 1986; LIEB 1988; PÉREZ-SANTOS & MORENO 1991). From Ecuador, four species are reported, namely *D. brunneus* (GÜNTHER, 1858), *D. nuchalis* (PETERS, 1864) and *D. percarinatus* (COPE, 1863), in the western slopes, and *D. dendrophis* (SCHLEGEL, 1837) in the eastern slopes of the Andes (ALMENDÁRIZ 1991; PÉREZ-SANTOS & MORENO 1991; COLOMA et al. 2000). This investigation presents the first record of the species *D. bivittatus* (DUMÉRIL, BIBRON & DUMÉRIL, 1854) in Ecuador with a detailed description of the specimen.

All the measurements of the individual collected were done using a metallic rule. Comparisons with other species were based on direct observation and information in PETERS & OREJAS-MIRANDA (1986) and PÉREZ-SANTOS & MORENO (1989b). All material here reported is deposited at the Fundación Herpetológica Gustavo Orcés (FHGO).

Dendrophidion bivittatus (DUMÉRIL, BIBRON & DUMÉRIL, 1854) previously has been reported in highlands of Colombia and the Darién, Panama (PETERS & OREJAS-MIRANDA 1986; PÉREZ-SANTOS & MORENO 1989a). In Ecuador, the checklists of reptiles of PETERS (1960) and MIYATA (1982) include *D. bivittatus* without certain evidence of specimens. Later, the taxonomic review by LIEB (1988), excludes this snake as did all other checklists published up to date (MIYATA 1982; PETERS & OREJAS-MIRANDA 1986; PÉREZ-SANTOS & MORENO 1989a; ALMENDÁRIZ 1991; COLOMA et al. 2000). Herein, we report on an individual (FHGO 5461) collected in the zone of Intag, parish Selva Alegre, canton Otavalo, Province of Imbabura (00°16'01" N, 78°35' 24" W, ca. 1700 m a.s.l., Fig. 1), on March 16, 2006, at about 12:00. The site was a

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Zeitschrift/Journal: Herpetozoa

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