On the occurrence of *Blanus strauchi aporus* Werner, 1898 and *Chalcides guentheri* Boulenger, 1887 (Reptilia) in the Mediterranean ecozone of Syria

by Bayram Göçmen, Ahmad M. Disi and Mehmet Zülfü Yıldız

Abstract. The amphisbaenian *Blanus strauchi aporus* has been rediscovered in Matn Abu Rayya, Tartous, with a voucher specimen, after approximately 125 years. The distribution area of Günther's Skink *Chalcides guentheri*, recorded from Syria for the third time, is extended some 140 km to the north-east (Al Wardiyat, Hims) of its previous northernmost locality of Mazbud (Saida), Lebanon.

Key words. *Blanus strauchi aporus*, *Chalcides guentheri*, Syria, distribution, Middle East.

Introduction

Studies on the Syrian fauna have become more numerous during the last two decades and several short-term herpetofaunistic studies, usually restricted to limited parts of Syria, have been conducted (e.g. DISI & BÖHME 1996, LYMBERAKIS & KALIONZOUPOULOU 2003, SINDACO et al. 2006). Many species of the Syrian herpetofauna have been found for the first time only recently. Two comprehensive studies with additional new records, including both a complete herpetofaunal list and the zoogeography of Syria, have been published by DISI & BÖHME (1996) and MARTENS (1997). Nevertheless, as also indicated by MORAVEC (1988), a number of questions regarding the distribution and taxonomy of Syrian reptiles still remain to be resolved, such as the possible occurrence of additional species that are already known from neighbouring countries.

During a field trip to the Mediterranean ecozone of Syria (23-26 April 2007), covering the provinces of Latakia, Tartous, Hims (Homs), Hama and Aleppo, new data on the Syrian herpetofauna were found.

Methods

Specimens were fixed with a 96% ethanol injection into the body cavity and were placed in 96% ethanol. This method was selected in order to allow the possibility of utilizing specimens for DNA studies in the future. They were subsequently coded and deposited in the Zoology Department of Ege University, Turkey (ZDEU). Pholidotic features were determined under a stereomicroscope and morphological measurements were taken using digital calipers (Mitutuyo 500-181 U) with an accuracy of 0.01 mm. Snout-vent length and tail length were measured to the nearest millimetre using a ruler. For bilateral pholidotic features, counts taken on both left and right sides (L/R) were used. The colour and pattern characteristics of specimens were recorded while they were still alive; colour photos were taken of the living animals. The geographic position of each sampling site was located by GPS (Fig. 1).

Zoology in the Middle East 43, 2008: 69–74.
ISSN 0939-7140 © Kasparek Verlag, Heidelberg

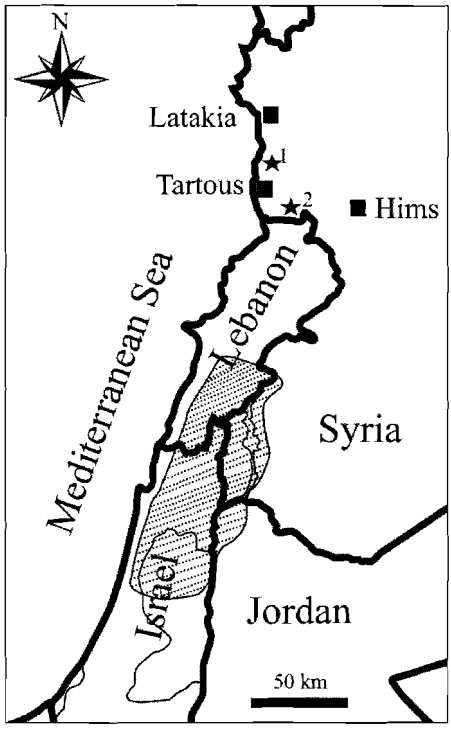

Fig. 1. Map showing the new localities (asterisks) for *Blanus strauchi* (1) and *Chalcides guentheri* (2), and the previously known distribution area of *Chalcides guentheri* (obliquely stippled area).1: Matn Abu Rayya-Tarsous province, 2: Al Wardiyat-Hims province.

Results and discusion

***Blanus strauchi aporus* Werner, 1898**

Material: ZDEU 58/2007 (1 specimen), Matn Abu Rayya (Jebel Bdire, 55 m, 35°02'56''N, 35°54'05''E), Tartous province, 25.iv.2007.

Pholidosis and measurements: The main pholidotic features and measurements of the Syrian specimen (Fig. 1) are summarised in Table 1, together with those of specimens which belong to the same and to other known subspecies (*B. s. strauchi*) collected from Anatolia in the same season to make a proper comparison.

Colour: Dorsum uniformly brown, venter paler than dorsum.

Habitat: Together with other reptiles [*Ophisops elegans* Ménétriés, 1832, *Laudakia stellio* (Linnaeus, 1758), *Ablepharus budaki* Göçmen et al., 1996, *Rhynchocalamus melanocephalus* (Jan, 1862)], the Syrian specimen was recorded on the western slope (55 m) of the northern extension of Jebel Bdire (Tartous) in a sparsely vegetated bushy biotope with a consolidated substrate enriched by clay-limestone, covered with small boulders near an olive orchard.

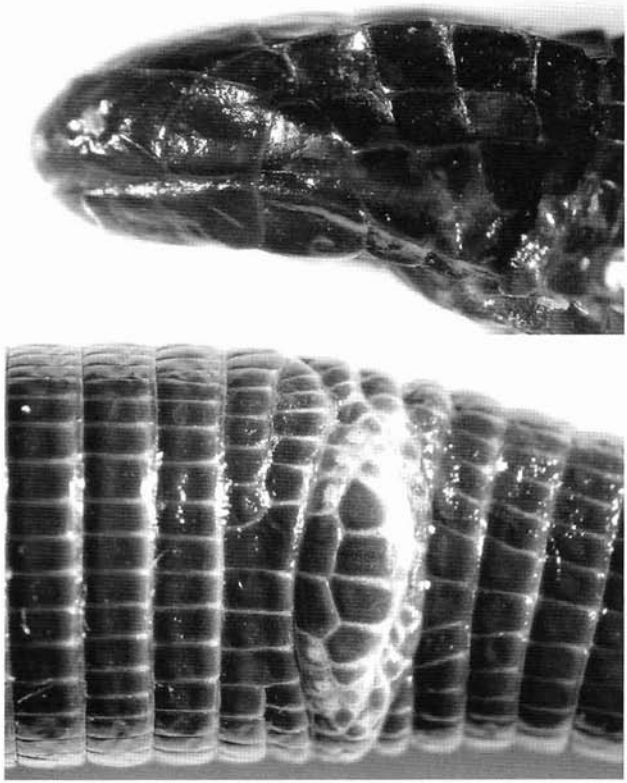

Fig. 2. Lateral aspect of the head (upper) and ventral aspect of the cloacal region (lower) of the Syrian *Blanus strauchi aporus* specimen after fixation.

Remarks: WERNER (1988) has indicated that the southern range limit of the species drawn by ALEXANDER (1966) is no longer valid. According to LORTET (1883), this species (as *Amphisbaena cinerea* Vand) was recorded from Tiberias (Israel) and Latakia (Syria), with single specimens in both localities. However, WERNER (1988) searched through the museum material and found that the Tiberias specimen really originated from Latakia. This species was therefore deleted from the herpetofaunal list of Israel. However, *Blanus strauchi* is definitely known from Lebanon (ALEXANDER 1966, IN DEN BOSCH et al. 1988, HRAOUI-BLOQUET et al. 2002). So far as the occurrence of the species in Syria is concerned, although much intensive work has been carried out during the last two decades, the only additional record was that mentioned by BISCHOFF & SCHMIDTLER (1994) from Qal'at al Husn, without giving any further information – they noted only its name. MARTENS (1997) mentioned this situation and stated that the species should be added to the herpetofaunal list given by DISI & BÖHME (1996). Apparently the single record, based on one specimen, was made by LORTET (1883). Except for the number of annuli along the ventral line, the specimen collected by us agrees almost completely in pholidosis and colour with the description of the known subspecies, *B. s. aporus*, which is also distributed in Hatay province, Anatolia, the closest locality

Table 1. Morphometric data of the Syrian and Anatolian *Blanus strauchi* specimens.

Subspecies	***B. s. aporus***	***B. s. aporus***	***B. s. strauchi***	***B. s. strauchi***
Locality	Tartous/ Syria	Samandağ/Hatay	Ödemiş / İzmir	Ödemiş / İzmir
Date	25.iv.2007	22.iv.2007	25.v.2007	25.v.2007
ZDEU code	58/2007	33/2007	144/2007/1	144/2007/2
Prefrontal length	2.03 mm	2.92 mm	2.11 mm	2.41 mm
Prefrontal width	2.20 mm	2.76 mm	1.97 mm	2.3 mm
Body diameter	6.79 mm	9.20 mm	4.16 mm	5.62 mm
Body diameter/Body Length	0.049	0.051	0.032	0.038
Snout-vent length	122.75 mm	158.1 mm	111.91 mm	128.82 mm
Tail length	15.65 mm	21.60 mm	13.19 mm	17.29 mm
Supralabials	3/3	3/3	3/3	3/3
Infralabials	3/3	3/3	3/3	3/3
Body annuli	93	98	113	112
Caudal annuli	17	17	18	16
Lateral annuli	3/2	3/3	3/3	2/3
Segments per mid-body annulus	41	35	38	33
Precloacal pores	6	6	6	7
State of precloacal pores row	On a segment row usually disjunct midventrally	On a segment row usually disjunct midventrally	On a segment row usually disjunct mid-ventrally	On a segment row usually disjunct mid-ventrally
Postmental and lateral shields of the first postgenial row broad, narrow or absent	Narrow	Narrow	Narrow	Narrow
Contact between second supralabial and prefrontal shields	Narrow	Broad	Narrow	Narrow

to the new locality in Syria. Although ALEXANDER (1966) stated that the number of annuli along the ventral line in *B. s. aporus* varies between 98 and 116, we found the count to be 93 which is the lowest known number in the species (Table 1).

***Chalcides guentheri* Boulenger, 1887**

Material: ZDEU 61/2007 (1 specimen), Al Wardiyat (Jebel Maisra, 152 m, 34°42'28''N, 36°10'53''E), Hims province (Tartous province direction), 25.iv.2007 (Fig. 1).

Pholidosis and measurements: Upper labials 6/6, the fourth one enters orbit. Lower labials 5/5. There are 20 dorsal rows of smooth scales at midbody. The number of scales from chin to cloaca is 131. The number of scales on the ventral side of the tail was counted as 142; however, the tail seems to have regenerated. Head width 5.84 mm; head length 8.95 mm; snout-vent length 132 mm; tail length 108 mm (regenerated). Limbs are much reduced (Fig.3): both fore- and hind limb lengths approximately equal to two body scales.

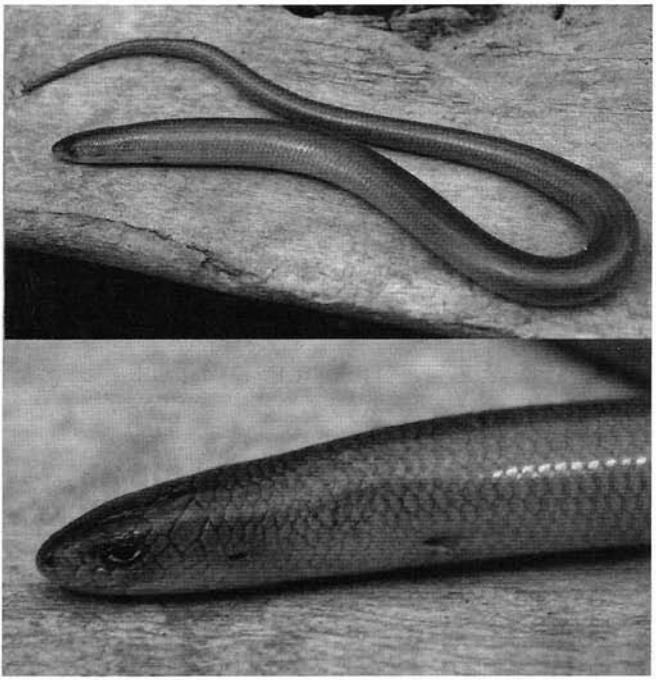

Fig. 3. General aspect (upper) and anterior region (lower) of the Syrian *Chalcides guentheri* specimen (live).

Colour: The upper side of the head is slightly darker than body; dorsum is uniformly olive silver-greyish, ventral side is lighter. Each dorsal scale has a darker margin, without any other pattern. The specimen was placed alive in a terrarium for approximately three weeks and it readily accepted termite larvae, but after a blood sample was taken for electrophoretic analysis, it died.

Habitat: The specimen was found active, at an elevation of 152 m, on open and moist ground of loose terra rosa type soil, covered with lava boulders of various sizes and sparsely distributed grasses near the motorway between Tartous and Hims, to the north of Al Wardiyat (Jebel Maisra). It was day time, around 17.00 hours, and the air temperature was approximately 33°C. In the same habitat, *Trachylepis vittata* (Olivier, 1804), *Eumeces schneiderii pavimentatus* (Geoffroy St. Hilaire, 1827), *Ophisops elegans* Ménétriés, 1832, *Laudakia stellio* (Linneaus, 1758), and *Dolichophis jugularis asianus* (Boettger, 1880) were also observed.

Remarks: *Chalcides guentheri* is endemic to the southern Levant region. It has been recorded from a small area including N Israel (WERNER 1987, 1988), S Lebanon (ZINNER 1967, HRAOUI-BLOQUET et al. 2002), NW Jordan (DISI et al. 2001) and the Golan Heights (BERGER-DELL'MOUR 1986, ESTERBAUER, 1992) (see Fig. 1, stippled area). The new, Syrian (Al Wardiyat) specimen agrees completely in pholidosis and colour-pattern with all the descriptions given by DISI et al. (2001) and DISI (2002). The present record of *C. guentheri* from Syria is only the third, and extends its known distribution some 140 km to the north-east (Al Wardiyat, Hims, Syria) from the previous northernmost locality of Mazbud (Saida), Lebanon

(HRAOUI-BLOQUET et al. 2002). At present there is no information on its reproduction biology (DISI et al. 2001), but during the dissection of our specimen we observed three ellipsoidal eggs of 6.04-7.04 mm in length.

Acknowledgements. We are deeply indebted to Dr Mehmet K. ATATÜR (Ege University, İzmir), and to Dr Petros LYMBERAKIS (Natural History Museum of Crete, University of Crete, Irakleio, Greece) and anonymous referees for reviews of an earlier version of the manuscript.

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Authors' addresses: Assoc. Prof. Dr Bayram Göçmen, Mehmet Zülfü Yıldız, Ege University, Faculty of Science, Department of Biology, Zoology Section, 35100 Bornova, Izmir, Turkey. – Prof Dr. Ahmad M. Disi, The University of Jordan, Department of Biology, Amman, Jordan. – E-mail: bayram.gocmen@ege.edu.tr.