

First evidence for the snake-eyed skink *Ablepharus kitaibelii* (Bibron et Bory de Saint-Vincent, 1833) (Sauria Scincidae) in Astypalea Island (Dodecanese, Greece)

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ABSTRACT

The first documentation (also with photos) on the presence of the snake-eyed skink *Ablepharus kitaibelii* (Bibron et Bory de Saint-Vincent, 1833) (Sauria Scincidae) in Astypalea Island (Dodecanese, Greece) is provided here. Until now, only five specimens in the Natural History Museum of Crete were known.

KEY WORDS

Ablepharus kitaibelii; Astypalea; Dodecanese; Snake-eyed skink.

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INTRODUCTION

The snake-eyed skink *Ablepharus kitaibelii* (Bibron et Bory de Saint-Vincent, 1833) (Sauria Scincidae) is the only species of the genus distributed in Europe and shows a distribution from southern Slovakia and Hungary, through most of Serbia, the eastern parts of continental Croatia, southern Romania, Bulgaria, Macedonia, Albania (lowland areas), Turkey (western and central), and Greece (Mainland, and many Ionian and Aegean Islands). As regards its range in the Aegean Islands, on Kos, Leros, Makronisi (SW of Lipsi), Nisyros, Tilos (Masseti, 1999), Chalki, Alimia, Symi, and Rhodes, it occurs with the nominate form *A. kitaibelii kitaibelii* (Bibron et Bory, 1833). On Karpathos, Kasos, Armathia, and Mikronisi (islets of Crete), *A. kitaibelii fabichi* Štěpánek, 1937 is present. On the island group of Kastellorizo and on the opposite southwest coast of Turkey, a cryptic species has been identified that seems to belong to a clade with features of both *A. kitaibelii* and *A.*

budaki, and which could be ascribed to *A. budaki anatolicus* Schmidtler, 1997 (Skourtanioti et al., 2016).

The occurrence of the snake-eyed skink *A. kitaibelii* in the Aegean Island of Astypalea (Dodecanese, Greece) is here reported for the first time.

MATERIAL AND METHODS

The data here presented came from field observation made by the authors on Astypalea Island during two different periods: August 2015 and April 2016. The individuals encountered were not captured or manipulated, but simply photographed in accordance with the Greek National Legislation (Presidential Decree 67/81). During the investigations, some young individuals of *A. kitaibelii* were sighted: a few in the immediate vicinity of a well located under the dam near the village of Livadhi, others along a boundary wall of an orchard inside Livadhi village (Fig. 1). Both situations were char-

acterized by moisture, supporting the hypothesis that *A. kitaibelii* is mainly a hygrophilous species. The individuals detected on Astypalea Island exhibited tails with orange-bright red colours (Fig. 2). Normally, the underside is greenish-blue or grey-white and in Transcaucasian and Thracian populations it appears reddish-orange (Gruber, 1981). As in the case with *Anatololacerta pelasgiana* on Tilos Island (Grano et al., 2018), a recent introduction can be assumed, since the only detected individual have been found in the immediate vicinity of Livadhi, the first most developed village on the island.

RESULTS AND CONCLUSIONS

Five specimens of *A. kitaibelii* from Astypalea Island preserved in the Natural History Museum of Crete (NHMC 80.3.82.25; NHMC80.3.82.256; NHMC80.3.82.257; NHMC80.3.82.85; NHMC 80.3.82.86) are known, but these data have not been published.

According to the Aegean distribution of this skink, it is likely to assume that on Astypalea Island the nominate form *A. kitaibelii kitaibelii* occurs. *Ablepharus kitaibelii* appears to be mainly a hygrophilous species (Cattaneo, 1998), as it generally lives on wet soil and in underwood bedding of

conifers forests (Broggi, 2002; Wilson & Grillitsch, 2009). It was also observed in inhabited areas, probably driven by increased moisture. Astypalea looks like an enigmatic island because, despite its size and its discrete environmental heterogeneity, does not host snakes. Until now, only four lizards have been recorded in the island: *Hemidactylus turcicus* (Linnaeus, 1758), *Mediodactylus kotschy* (Steindachner, 1870), *Podarcis erhardii* (Bedriada, 1876), *Ophisops elegans* Ménétries, 1832 and one frog: *Pelophylax bedriagae* (Camerano, 1882).

The island is essentially hilly and is mainly characterized of limestone, whereas the area between the orographic series of the Mesa and the Exo Nisi (eastern and western part of the island) is constituted by flysch. Astypalea is mainly dry, but its karstic nature has given origin to water sources, especially in the western area. Moreover, in the Exo Nisi near Livadhi, there is a reservoir with a depth of 25 meters to supply water to the island. Astypalea suffers since ancient times of strong overgrazing by domestic and wild goats. In the past, the island was rich in forests, which have been destroyed by humans to use as farmland and pastures and as fuel in the lime kilns, which played a key role in the economy of Astypalea (Cattaneo & Grano, 2016). This probably led to an impoverishment of the local herpetofauna, as it was shown for the lizard of the genus *Podarcis* Wagler, 1830 (Pafilis et al., 2013). Despite a relatively long-standing tradition of herpetological research on the Greek islands (Pafilis, 2010), Astypalea ranks among those less considered, as there are no records of amphibians and reptiles with full field details available from the island (Uhrin & Benda, 2018).

Contributions relating data on herpetofauna of this island are provided by Zavattari (1929), Wettstein (1937, 1953), Beutler & Gruber (1977) and Angelici et al. (1990). Recently, an update on the presence of *Mediodactylus kotschy* and *Hemidactylus turcicus* on this island has been published by Uhrin & Benda (2018).

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Figure 1. Study area near Livadhi village (Astypalea Island, Dodecanese, Greece).



Figure 2. *Ablepharus kitaibelii* from Livadhi village (Astypalea Island, Dodecanese, Greece).

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