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First record of the Dwarf Snake *Eirenis modestus* (Martin, 1838) (Reptilia Squamata) in Telendos Islet (Dodecanese, Greece)

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ABSTRACT The occurrence of the dwarf snake *Eirenis modestus* (Martin, 1838) (Reptilia Squamata) in the Dodecanese Islet of Telendos (Greece) is reported here for the first time.

KEY WORDS Aegean island; Serpentes; *Eirenis*; Kalymnos; Telendos.

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INTRODUCTION

The dwarf snakes of the colubrine genus *Eirenis* comprise 18 currently recognized species, which are mainly distributed in the Middle East, but also extend into Southeastern Europe, the Caucasus Mountains, Pakistan, and northeastern Africa. The members of the genus are comparatively small and slender, with the maximum length only rarely exceeding 600 mm (Mahlow et al., 2013).

In particular, *Eirenis modestus* (Martin, 1838) shows the dorsum unicoloured light brown-greyish, sometimes with some dark spots at the beginning of the back, except in the subspecies *E. modestus semimaculatus* (Boettger, 1876) in which little dark spots can be found along the entire back; pileus with distinct interocular and parietal bands, both often fused posterior to the eyes; collar distinct and bent anteroventrally in lateral view, extending over five or more dorsal scale rows; sometimes a transverse row of spots posterior to the collar; venter mostly light; head colouration fading in older individuals. Melanistic specimens are known in Turkey from the Muğla province and the Yassica and Sariot Islands (Baran, 1986; Mahlow et al., 2013) and in Greece from Kastellorizo (Kalaentzis et al., 2018). Spotted and unspotted specimens of *E. modestus semimaculatus* are reported for Symi Island (Mahlow et al., 2013). The species is active from April to November and it can be found under flat, comparatively small stones in badlands, steppes or areas with extensive agricultural use from 1260 to 2000 m a.s.l. Active at dawn, sometimes found on the ground during the day. As active hunter, it feeds on scorpions, Aranei, Acri, Chilopoda, Matodea, Orthoptera, Neuroptera, Hymenoptera, Lepidoptera larvae, scolopenders, other insects, small lizards, rarely worms, snails and small fish (Schweiger, 1995; Mahlow et al., 2013). The distribution of this species is known for Armenia, South Azerbaijan, East Georgia, Greece (Thrace and the islands of Alatonisi, Chios, Fourni, Kalymnos, Kastellorizo, Leros, Lesbos, Mytilini, Samos, Symi), northwestern to North-Central Iran, southern Russia (Daghestan). Its presence in the Turkish Thrace and Iraq requires confirmation (Mahlow et al., 2013).

Eirenis modestus is a complex of taxa, which badly needs a revision. Here, we provisionally fol-

low the current classification proposed by Schmidtler (1993, 1997) who recognized three subspecies: *E. modestus modestus*, *E. modestus semimaculatus* and *E. modestus cilicius* Schmidtler, 1993.

MATERIAL AND METHODS

Study area

Telendos is an islet of about five km² and lies only 750 meters off Kalymnos (Dodecanese Islands, Greece). It was once connected to Kalymnos from which it detached following a devastating earthquake in 554 AD (Dawson, 2015), therefore it has a fairly recent origin. The only way to get to Telendos is by small boats from nearby Myrties, located on the opposite coast of Kalymnos Island.

Telendos has the appearance of a mountain rising out of the sea as it is quite tall (459 m a.s.l.) and very steep. It is essentially made up of limestone cliffs, which are mainly inhabited by birds of prey such as the Eleonora's falcon. Telendos is rather rugged and difficult to walk around indeed there are no roads but only rough paths that run along the western and eastern parts of the island. It has no water sources, and the only settlement is a small port with very few inhabitants. However, it is a popular destination for climbers thanks to its steep vertical limestone cliffs. The landscape consists of phrygana, which mirrors that of Kalymnos, and its most representative elements are *Genista acanthoclada* DC., *Calicotome villosa* (Poir.) Link), *Origanum onites* L., *Salvia fruticosa* (Mill.) and *Ononis ramosissima* Desf., interspersed with patches of *Pistacia lentiscus* L. and *Daphne gnidioides* Jaub. & Spach. There are also scattered olive trees.

Material

Naturalistic researches were carried out from 20 to 24 April 2024 in Kalymnos and Telendos Islands. The identification of the *Eirenis* specimen occurred through direct observation in the field and several photos were taken directly on site. Information relating to the herpetofauna of Telendos was relied from the relevant literature (Schneider, 1983; Sindaco et al., 2014; Cattaneo et al., 2020, 2023; Grano et al., 2024) and from the museum collections preserved at the Natural History Museum of Vienna (NHMW) and the Natural History Museum of Crete (NHMC).

RESULTS AND CONCLUSIONS

The herpetofauna of Telendos includes *Laudakia stellio* (Linnaeus, 1758) family Agamidae, *Ophisops elegans* Ménétries, 1832 family Lacertidae, *Blanus strauchi* (Bedriaga, 1884) family Blanidae (Schneider, 1983; Sindaco et al., 2014; Cattaneo et al., 2020, 2023) and *Hemorrhois nummifer* (Reuss, 1834) family Colubridae recently added by the authors (Grano et al., 2024). During naturalistic researches carried out on Telendos and Kalymnos in late April 2024, one specimen of *Eirenis modestus* was found on Telendos in the Lambda climbing area, located in the northeastern part of the island at the base of a limestone cliff (Fig. 1). Half of the body was inside a crevice of a cliff. The choice of cliffs as a refuge for various ophidian species has been observed several times both for the island of Kalymnos and for the two nearby islands of Telendos and Pserimos. A specimen of *E. modestus* has been detected at the base of a limestone cliff at Aghios Fotis in Kalymnos (Fig. 2), and exuviae of *Telescopus fallax* (Fleischmann, 1831) family Colubridae have been found in Kalymnos (Sikati) and Pserimos emerging from crevices and ledges of limestone cliffs. Moreover, in August 2024 the authors found an exuvia of *Hemorrhois nummifer* at the base of a cliff in Telendos (Grano et al., 2024). Limestone cliffs are ideal habitats for numerous plant and animal species, thanks to their physical and ecological characteristics.

Previously (Grano et al., 2024), the authors hypothesized that, given the recent origin of Telendos, the reptile species present on the islet were indigenous and did not arrive from Kalymnos through a passive translocation. The finding of a specimen of *E. modestus* far from the small port of the islet (the only inhabited centre) would support the hypothesis of the autochthonous origin of the herpetofauna of Telendos (Grano et al., 2024).

The specimen of Telendos was pearl grey in colour with a faded spot on the head and a barely noticeable band on the neck (Fig. 3). This colour-

Figure 1. *Eirenis modestus* of Telendos Islet (Dodecanese, Greece).

Figure 2. *Eirenis modestus* of Kalymnos Island (Dodecanese, Greece).

Figure 3. *Eirenis modestus* of Telendos Islet (Dodecanese, Greece).

Figure 4. *Eirenis modestus* of Kalymnos Island (Dodecanese, Greece).

tion appears very different from the Kalymnos specimens characterized by a light ochre coloration on the back without any ornamentation, with a brown band on the neck and a brown spot on the upper part of the head (Fig. 4).

A similar pattern to that of Telendos specimen had already been observed by Wettstein (1937, 1953) on several specimens of *Eirenis* found on the small island of Alatonisi (also called Alazonisi and Alazopetra) in the Fourni Archipelago. Indeed, these specimens was devoid of any pattern with the complete absence of the dark band on the neck and for this reason was described by Wettstein (1937) as a new subspecies *Eirenis (Contia) modestus werneri* Wettstein 1937. This taxon was later invalidated by Baran (1986).

This might suggest that on very small islands *Eirenis modestus* would tend to have a very faded pattern like in the Telendos specimen, a question that could only be resolved by intensifying research on small islands.

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