

The first confirmed records of the Mediterranean house geckos, *Hemidactylus turcicus* (Squamata: Gekkonidae) in Bosnia and Herzegovina

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Abstract. Here we provide the first confirmed records of *Hemidactylus turcicus* (Linnaeus, 1758) in Bosnia and Herzegovina. Although this species was for a long time considered common in Bosnia and Herzegovina and it is included in the species list of the country, clear evaluation of the available scientific literature revealed the species presence in the country was never provided. Therefore, the aim of the note is the confirmation of *H. turcicus* presence in Bosnia and Herzegovina.

Key words: historical records, range extension, Adriatic coast, Republic of Srpska, Bosnia and Herzegovina.

The Mediterranean house gecko, *Hemidactylus turcicus* (Linnaeus, 1758), is an autochthonous and widely distributed representative of the Mediterranean fauna of southern Europe, western Asia and northern Africa; also, it was introduced into North and Central America, and in numerous places – including islands – in Europe (Speybroeck et al. 2016, Urošević et al. 2016). According to Radovanović (1951), in the former Yugoslavia this species was present along entire eastern Adriatic coast, from Istria (in the nowadays Croatia) to Ulcinj (Montenegro). Its introduced populations are also known from several cities in Serbia (Urošević et al. 2016). This species was considered common in Bosnia and Herzegovina (B&H) and it is included in the current list of herpetofauna of B&H (Jablonski et al. 2012, Lelo et al. 2016). However, detailed evaluation of the available scientific literature revealed the exact proof of its presence in the country was never provided. In this sense, the aim of the present report was the confirmation of the presence and evaluation of distribution of *H. turcicus* in B&H.

The present paper resulted from the analysis of the

available relevant literature records and the authors' field-work.

On July 21, 2017, in the area of the city of Neum (Federation of Bosnia and Herzegovina: 42.932N, 17.593E, 16 m a.s.l, Fig. 1a – yellow dots), a single individual of *H. turcicus* was observed (by G. Š.) on the wall of a residential building. Another record comes from the city of Trebinje (Republic of Srpska: 42.702N, 18.350E, 275 m a.s.l, Fig. 1a – red dots). House gecko individuals were observed by G. Š. and I. M. during August and September of 2019, also in a residential building. Visits were made on purpose and regularly. On several occasions, approximately 10 individuals of different ages (sizes) were spotted. On September 17, 2019 one adult animal was caught, measured (snout-to-vent length was 54.0 mm) and photographed (Fig. 1b, c).

All relevant written sources provide three localities as the places where *H. turcicus* was reported from B&H, namely Stolac and Zavala (Werner 1904, 1907), and the village Gabela near Čapljina (Bolkay 1928; Fig. 1a). However, the data provided by Werner (1904, 1907) were based solely up-

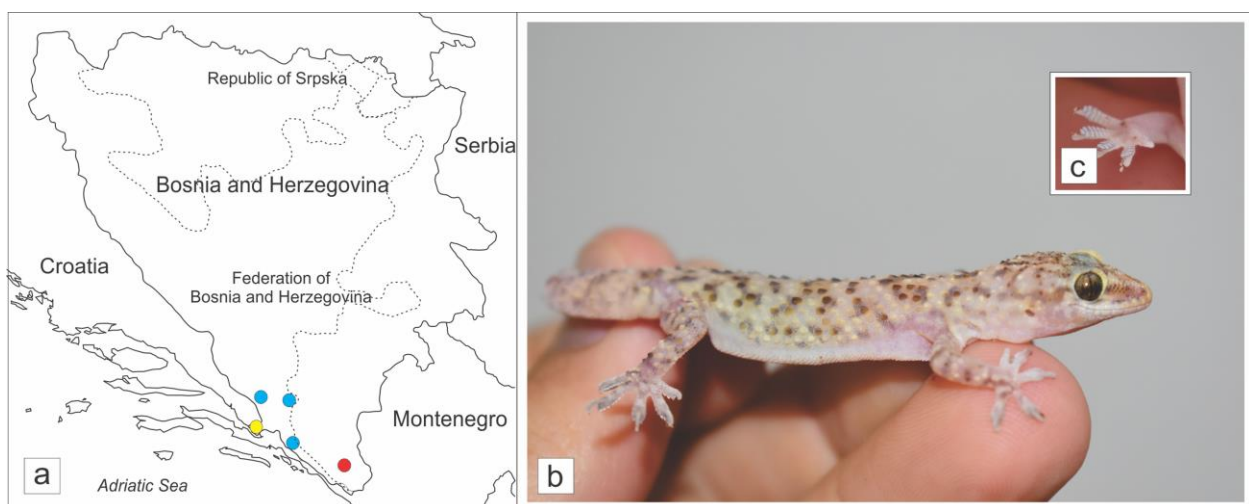


Figure 1: a) the literature data (blue dots) and the certain findings of *H. turcicus* from this study (yellow and red dots); b) the individual caught in Trebinje; c) enlarged detail of the animal's foot with the characteristic lamellae on fingers.

on the information obtained from an unidentified source that the species lives in Stolac and Zavala, whereas the author himself did not find it there. On the other hand, Bolkay (1928) stated that the species was known from the village Gabela near Čapljina and that for the information he is thankful to mister Lustig, the railwayman who said that the gecko lives in old houses in the Gabela village. Nevertheless, the author claimed that he sought for the species unsuccessfully, and that he thought that Werner's assertion (1904, 1907), if correct, probably relates to the area around the Bregava River. This was not confirmed in the relevant literature. From the work of Radovanović (1951), it could be concluded that the species inhabits the Adriatic coast in B&H; however, detailed analysis of his records showed that he did not find it there. The doubts regarding these claims were apparently removed by Šenk (1980), who decidedly stated that Gekkonidae were not found in B&H until the given year. To the assumptions on the *H. turcicus* distribution, Veith's beliefs were added (made during the 1920s, published in 1991). He expected that this species could be found in the coastal regions of B&H, in the Neum-Klek area. This assumption we finally confirmed in the present paper.

Since the available relevant literature did not provide any particular data confirming the assumptions or reliable data of species occurrence in B&H, in this report we provide the first confirmed findings of *H. turcicus* for the country.

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