



Short Note

A fortuitous encounter with the invasive Gecko, *Cyrtopodion scabrum* (Heyden, 1827): A new locality in Ouargla province, Southeast Algeria (Squamata: Gekkonidae)

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ABSTRACT

A new locality of the Rough Bent-toed Gecko *Cyrtopodion scabrum* (Heyden, 1827) is recorded from Ouargla province, south-east Algeria, where it was previously registered in northern Algerian Sahara at El Oued and El Menia. We based on observations of direct captures last 2021.

C. scabrum is medium-size adult may reach 4.5 ± 0.8 Cm of snout vent length and up to 9.5 ± 2 Cm total length.

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1. Introduction

Invasive species introduction and their spread on a global scale constitute a well-documented threat to biodiversity [1-4]. Some species have disseminated voluntarily to find food sources or by exchanging as plants, fish, and birds [5-7], in contrast, others spread unintentionally, by means of goods stowaways such as reptiles and amphibians [8-10].

Cyrtopodion genus (Fitzinger, 1843) include about 82 species [11], these geckos are the most widely distributed in Circum-Indus part of Oriental and Palearctic region [12]. As this genus was divided into four groups: *Cyrtopodion agamuroides* (Nikolsky, 1900); *Cyrtopodion caspium* (Eichwald 1831); *Cyrtopodion kotschy* (Steindachner, 1870) and *Cyrtopodion scabrum*

(Heyden 1827) [12-13].

Cyrtopodion scabrum is widely distributed in its genus) [12], it is resident in Afghanistan, Egypt, Ethiopia, India, Iraq, Palestine, Jordan, Kuwait, Oman, Pakistan, Qatar, Saudi Arabia, Sudan, Syrian Arab Republic, Turkey, United Arab Emirates and Yemen) [14-18]. Moreover, this species is also introduced in Iran, Islamic republic, United states (Texas), Algeria) [19, 20]. *C. scabrum*, found in rocky coastal areas, urban areas, villages and on building walls and ruins, oasis, dry wadis and in dry grasslands) [15, 17, 20, 21]. In the northern Algerian Sahara, we have 39 species of herpetofauna between amphibians and reptiles [22], Surprisingly, The Rough-tailed

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Gecko was included in the list of reptile Algeria until today. As *C. scabrum* was recorded for the first time on Algeria from five different locations at El Oued [20], and then also in El Menea [21]. Herein, we provide the first report of its presence in Ouargla.

2. Materials and Methods

2.1. Study area

The Ouargla region (31 ° 52 'to 32 ° 30' N; 4 ° 27 'to 5 ° 26' E.) is located in the northern Algerian Sahara, at an altitude average of 134 m [23] (Fig. 1). The climate is Saharan with mild winter and dry hot summer.

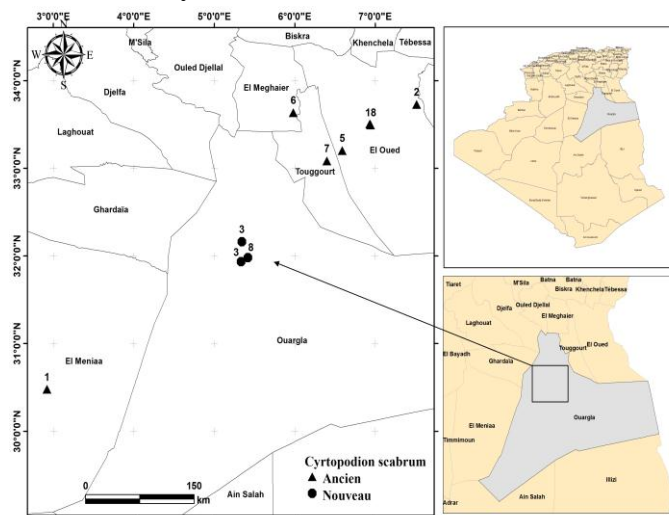


Figure 1. Map showing the known geographic distribution of *C. scabrum* in Oued state and Ouargla state

2.2. Reptile sampling

C. scabrum from the Gekkonidae family and is characterized by medium-size adult (LT= 119cm; SVL= 3.1–5.5 cm; FL= 1.91–2.13 cm; HL= 2.64–2.84cm) [16,20]. We collected 12 geckos of *C. scabrum* during March and Mai 2021, where our specimens were caught by hand. The following morphological variables were measured using an electronic caliper: total length (LT), snout vent length (SVL), and tail length (VT). Head height (HH); Length of the mouth (LM); Hind leg length (HL); Foreleg length (FL); Length of the 4th toe of the hind paw (T4L), as well as counts the the number of supralabial scales (SLP) and the number of infralabial scales

In the present paper, we offer data on the distribution and the morphology the *Cyrtopodion scabrum* in Sahara Algerian and it continued expansion After it was discovered in the valley and Ghardaia



Figure 2. (A) *Cyrtopodion scabrum* specimen (in-situ) in Sidi Khouiled; B: Dorsal view of our species

3. Results and Discussion

In 30 March 2021, three specimens (one adult and two juveniles) of *C. scabrum* were collected from Sakra city in Ouargla Province (5°19'50.34"E; 31°56'11.26"N, 137 m a.s.l.), where our specimens were found in ancient urban sites. On 5 April 2021, another three adults were observed in a house close to the village El Bour in the northeast part of the N'Goussa (Fig. 1).

On 15 Mars- 5 Mai 2021, at h, in the Sidi Khouiled, we observed several specimens (8 individuals) in urbans site (5°24'50.18"E; 31°58'57.85"N ;154 m a.s.l.).

We also noticed that all these specimens that we found are concentrated in the inhabited houses.

Actually, the presence of Rough Bent-toed Gecko in Ouargla, should not be surprising, given that [20] are found them in the Taleb El-Arbi from El Oued in 2009.

Measurements, escalation characters and colors were examined for each specimen, are as follows: On average, Total length (TL): 9.6 ±2Cm, snout–vent length (SVL):4.5±0.8Cm, tail

length (VT): 5.1 ± 1.2 Cm, number of supralabial scales (left side):9, number of infralabial scales (left side): 9, The dorsal coloration is cream white brown with some regular brown colored spots on the body and brown bars on the tail (Fig. 2B).

Table 1. Descriptive statistics of morphometric traits (cm), body weight (g) and number of the Rough Bent-toed Gecko (*Cyrtopodion scabrum*) in the Ouargla.

Traits	Measurement (cm)
WT	3.2 ± 0.3
LT	9.6 ± 2
SVL	4.5 ± 0.8
VT	5.1 ± 1.1
HH	0.5 ± 0.14
LM	0.8 ± 0.14
HL	2.5 ± 0.4
FL	1.7 ± 0.3

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T4L	0.5 ± 0.2
SLP	9.3 ± 0.5
INF	9 ± 0.2

WT: Weight; LT: Total length; SVL: snout to-vent-length; VT: Tail length; HH: Head height; LM: Length of the mouth; HL: Hind leg length; FL: Foreleg length; T4L: Length of the 4th toe of the hind paw; SLP: Number of supralabials scales; INF: Number of infralabials scales

Conclusion

In summary, based on the present study, the authors regard the presence of Rough-tailed Gecko in the Ouargla the outcome of expansion of its distributional range. Further investigations are needed to shed more light on other unresolved aspects of this species distribution.

Conflict of Interest

The authors declare that they have no conflict of interest

- Cyrtopodion heterocercum heterocercum* (Sauria: Gekkonidae) from Isfahan Province, Central Iran, with an extended description and notes on distribution. *Russ. J. Herpetol.* 2009, 16: 220-228.
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