



Short Note

A new locality of an invasive Gecko, *Cyrtopodion scabrum* (Heyden, 1827) in Algeria (Squamata: Gekkonidae)

Salah Eddine Sadine ^{a*} Choyaib Bounab^{a,b} and Mayssara El Bouhissi^c

^a Faculté des Sciences de la Nature et de la Vie et Sciences de la terre, Université de Ghardaïa, BP 455 Ghardaïa 47000, Algeria.

^b Laboratoire Biologie, Eau et Environnement (LBEE), Faculté SNV-STU, Université 8 Mai 1945 Guelma. BP. 401 24000 Guelma, Algeria.

^c Laboratoire d'écodéveloppement des espaces, faculté des sciences de la nature et de la Vie, Université Djillali Liabes de Sidi Bel Abbès, Algeria. Forest conservation of Sidi Bel Abbès, Algeria.

ARTICLE INFOR

Article history:

Received 06 March 2021

Revised 24 May 2021

Accepted 16 Jun 2021

Keywords:

Cyrtopodion scabrum;
Gecko;
Invasive species;
Algeria.

ABSTRACT

The Rough Bent-toed Gecko *Cyrtopodion scabrum* (Heyden, 1827) was recently recorded in Algeria, from the east part of countries. In this note, another new locality of this species in the central Algeria (Ghardaïa region), situated at 450 km west from the last locality, based on one specimen found in Bord of Sebkhet. *C. scabrum* is listed as an invasive species and it was reported as a desert species, in our finding it was recorded in an important wetland (Sebkhet El Melah) which is classified in the Ramsar list in 2004, this statement proves once again the ecological plasticity of this species.

© 2021 Faculty of Natural Sciences and Life, University of Echahid Hamma Lakhdar. All rights reserved

1. Introduction

The rough bent-toed gecko, *Cyrtopodion scabrum* (Heyden 1827), is a small lizard originally from the Middle East and northeast of North Africa [1]. Despite, *C. scabrum*, is the most widely distributed species in its genus [2], it was more introduced in other countries outside of its native geographical range [3,4].

As it is considered as an invasive species, *C. scabrum* is generally expanding its population size and its distribution range [1], to reach Algeria countries very far from native region in Middle east and south-west Asia [1,5].

Our finding provides another new locality of this species in the central Algeria (Ghardaïa region), situated at 450 km west from the last locality in the east part of countries [5]. This new locality is a great wetland of Sebkhet El Melah, confirming the high ecological plasticity of this species to leave in different biotopes and different climates.

2. Materials and Methods

2.1. Study area

Sebkhet El Melah (Fig. 2) wetland is located at 870 km to the south of Algiers, in the center of the Algeria (30°25'–30°32'N. and 02°54'–02°56'E.) at an altitude ranging from 330 to 397 m, with a total area of 72 000 ha [6]. It is a permanent wetland classified in the Ramsar list in 2004 [7]. It is enclosed by rocky hills and sand dunes [8]. The lake is composed of an upper fresh basin connected to a lower salt one, both are mainly supplied by drainage water, rain and sewage from the city of the same name [9]. This region is characterized by a very important plant diversity varies according to the season, with a dominance of a few botanical families such as: Poaceae with *Stipagrostis obtus*, *Polypogon monspeliensis*, Amaranthaceae represented essential by *Chenopodium mural* and *Amaranthus hybridus* [10].

* Corresponding author : Salah Eddine Sadine

Tel.: 0660396971

E-mail address: sse.scorpion@yahoo.fr

Peer review under responsibility of University of Echahid Hamma Lakhdar. © 2021 University of Echahid Hamma Lakhdar. All rights reserved.

doi : <http://dx.doi.org/10.5281/zenodo.5045172>.

2.2. Taxonomic account

Gekkonidae Opper 1811
Cyrtopodion Fitzinger 1843
Cyrtopodion scabrum (Heyden 1827) (Fig. 1a)

Type material. Algeria, Ghardaïa, Region of El-Goléa (El-Menia), 30°30'N., 2°59'E., in Bord of Sebket El Melah, 370 m, 22/X/2020 (S.E. Sadine & M. El Bouhissi), one individual. This specimen was photographed and released into the wild.

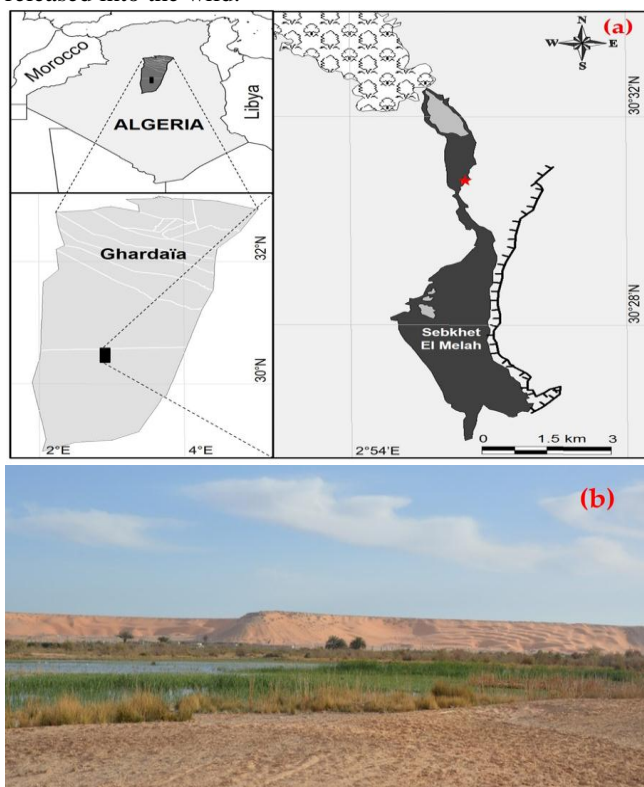


Fig 1. Location of lake Sebket El Melah (study area) a. general view of the lake; b. Lower basin of the lake



Fig. 2. *Cyrtopodion scabrum* in natural habitat. a: General view; b: dorsal view of the head; c: lateral view of the head

3. Ecological remarks

As noted in introduction that the rough bent-toed gecko *Cyrtopodion scabrum*, has a high ecological plasticity:

a. It is able to live in different biotopes as salt marshes [11], in urban habitats and in oases of date palm [5] and in the wetland (Current note).

b. This species preferred the dry climates and desert ecotypes [12]. Contrariwise, in this note this species was found in a great wetland (Sebket El Melah) where the relative humidity varied from 20 to 60% [13]

c. Also, this species shows an independence to the altitudinal parameters, because, it was found at less than 100 m above sea level in east Algeria [5], at an altitude ranging from 330 to 397 m (Current note) and can reach to 1,800 m above sea level [1].

According to the first repartition of *C. scabrum* in the east Algeria [5] and the new locality in this note. The current distribution of this species in Algeria can be summarized in figure (3)

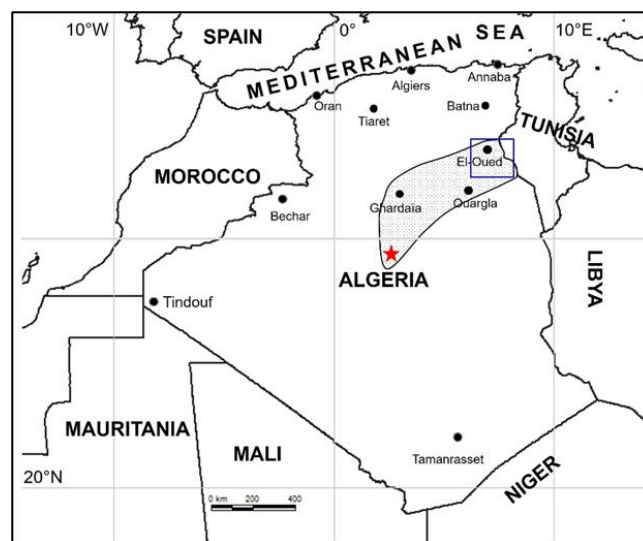


Fig. 3. Map of the present geographical distribution range of *Cyrtopodion scabrum* in Algeria (dashed area). First locality (bleu square) following Mouane et al. (2020) [5], New locality (red star).

Conflict of Interest

The authors declare that they have no conflict of interest

References

1. Werner Y, Mousa-Disi AM, Tok V, Ugurtas I, Sevinç M, Baha El Din S, Nilson G. *Cyrtopodion scabrum*. The IUCN Red List of Threatened Species, 2010, e.t164748a5922551. <https://doi.org/10.2305/iucn.uk.2010-4.rlts.t164748a5922551.en>
2. Khan MS. Review of the morphology, ecology, and distribution of geckos of the genus *Cyrtopodion*, with a note on generic placement of *Cyrtopodion brachykolon* Krysko et al. 2007. *Caspian Journal of Environmental Sciences*. 2008, 6:79–86.
3. Bartlett RD, Bartlett P. A Field Guide to Texas Reptiles and Amphibians. Texas: Gulf Publishing Co., Houston;1999.
4. Stocking SE, Jones JL. Geographic distribution: *Cyrtopodion scabrum* (Rough-tailed Bowfoot Gecko). *Herpetological Review*. 2017, 48;2: 389.
5. Mouane A, Bourougaa D, Hamdi M, Boudjerada K, Harrouchi A, Ghennoum I, Sekour M, Chenchouni, H. The Rough Bent-toed Gecko *Cyrtopodion scabrum* (Heyden, 1827) (Squamata: Gekkonidae): First records in Algeria and NW Africa with morphometric and meristic description of population. *African Journal of Ecology*. 2020. <https://doi.org/10.1111/aje.12797>
6. Alioua Y, Bissati S, Kherbouche O, Bosmans R. Spiders of Sebket El Melah (Northern Sahara, Algeria): Review and new records. *Serket*. 2016, 15;1: 33-40.
7. RAMSAR. The Annotated Ramsar List of Wetlands of International Importance: Algeria. https://rsis.ramsar.org/RISapp/files/RISrep/DZ1429RISformer_161020.pdf (accessed 20 January 2021).
8. Hacene H, Fatima R, Naila C, Boutaiba S, Tej B, Baratti J, Ollivier B. Biodiversity of prokaryotic microflora in El Golea Salt Lake, Algerian Sahara. *Journal of Arid Environments*. 2004, 58: 273-284.
9. Bouzid A, Youfi J, Boukhssaim M, Samraoui B. Première nidification réussie du flamant rose *Phoenicopterus roseus* dans le Sahara Algérien. *Alauda*. 2009, 77;2: 139-143.
10. Chehma A. Catalogue des plantes spontanées algérien. Ouargla: Dar El Houda; 2006.
11. Ibrahim AA. The Herpetology of the Suez Canal Zone: Is the Suez Canal a Bridge or a Barrier to Herpetofauna? The Fifth World Congress of Herpetology [Abstract]. Stellenbosch, South Africa. 2005.
12. Largen MJ, Spawls S. Amphibians and reptiles of Ethiopia and Eritrea. Frankfurt: Edition Chimaira. 2010.
13. Meddour S. Étude du régime alimentaire de la Foulque macroule et de quelques espèces d'Anatidae au niveau de Sebket El-Maleh (El-Menéa- Ghardaïa). *Mémoire d'Ingénieur d'État en Sciences Agronomiques. Université de Ouargla*;2013.

Recommended Citation

Sadine S., Bounab C., El Bouhissi M. A new locality of an invasive Gecko, *Cyrtopodion scabrum* (Heyden,1827) in Algeria (Squamata: Gekkonidae). *Algerian Journal of Biosciences*. 2021, 02(01):016-018.

doi : <http://dx.doi.org/10.5281/zenodo.5045172>

Or

Recommended Citation

Sadine S., Bounab C., El Bouhissi M. A new locality of an invasive Gecko, *Cyrtopodion scabrum* (Heyden,1827) in Algeria (Squamata: Gekkonidae). *Alger. j. biosciences*. 2021, 02(01):016-018.

doi : <http://dx.doi.org/10.5281/zenodo.5045172>



This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/)