



Nota breve | Short note

## First record of *Tarentola* for the Island of Sal, Cabo Verde

Marcos Hernández-Montero<sup>1, \*</sup>, Marcio Santos<sup>1, 2</sup> & Patrik Silva<sup>3</sup>

<sup>1</sup> APB, Associação Projeto Biodiversidade, Santa Maria, Sal Island, Cabo Verde

<sup>2</sup> Márcio Santos Serviços Turísticos, Sal Island, Cabo Verde

<sup>3</sup> School of Resources and Environmental Science, Wuhan University, Wuhan, China

\* Corresponding author e-mail: [marcos.hdezmm@gmail.com](mailto:marcos.hdezmm@gmail.com)

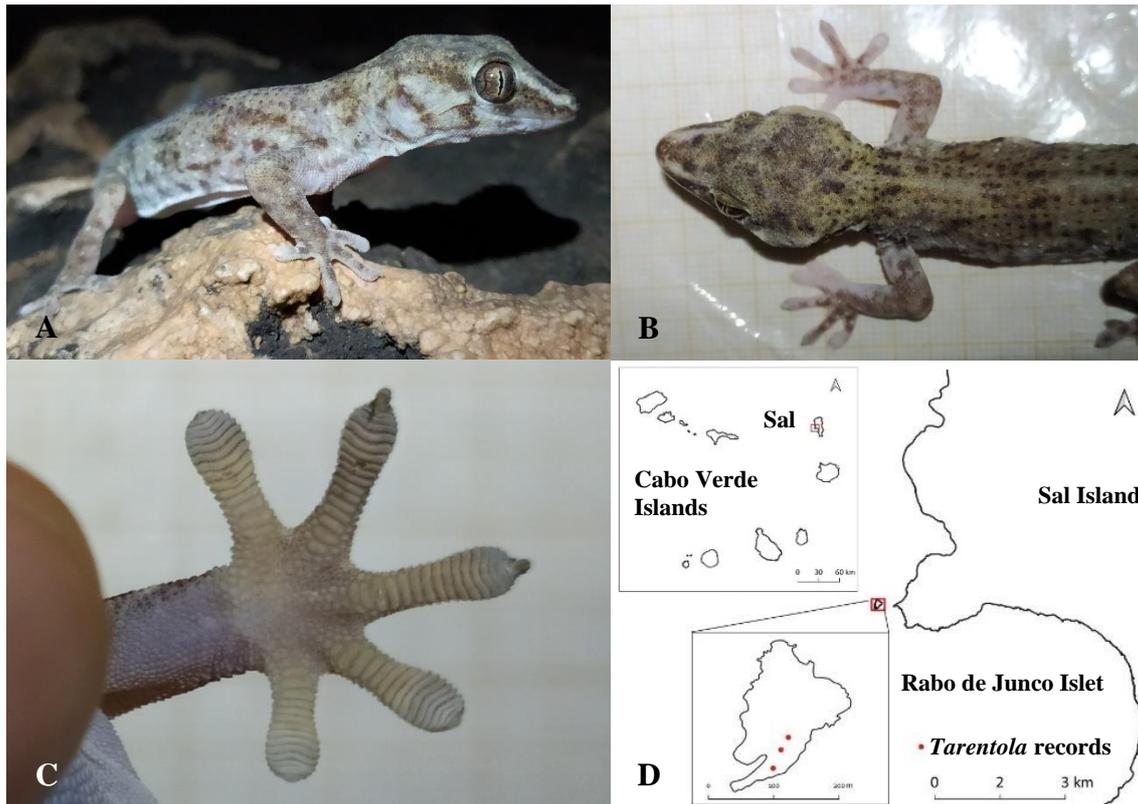
**Keywords:** reptile, Phyllodactylidae, gecko, islet, Macaronesia, distribution

Although numerous terrestrial reptile studies have been carried out in the past decade on the main islands of Cabo Verde, some of the islets have not yet been studied. Fieldwork is urgently needed to reduce the Wallace shortfall in the smaller and more remote islands (Vasconcelos *et al.* 2013). Three different genera (*Chioninia*, *Hemidactylus* and *Tarentola*) are represented by endemic species on the islands (Vasconcelos *et al.* 2013). *Tarentola* is a genus of the family Phyllodactylidae with around 30 species. The genus is distributed across the Mediterranean region, mainland Africa and on West Indies and Macaronesian islands (Uetz *et al.* 2022). All species have robust bodies, non-divided digital lamellae and claws on the third and fourth digits (Arnold & Ovenden 2002).

In Cabo Verde, *Tarentola* has been reported on Santo Antão, São Vicente, Santa Luzia, São Nicolau, Boavista, Santiago, Fogo, Brava and on Branco, Raso and Rombos islets (Vasconcelos *et al.* 2013). Its occurrence on

Sal (Angel, 1935, 1937) is doubtful and based on only one specimen from 1934 (Vasconcelos *et al.* 2013). Sal is a relatively accessible and easy to sample island, but subsequently, no specimens were found there (Vasconcelos *et al.* 2013). The goal of this work was to clarify the presence of native *Tarentola* on Sal.

The search for *Tarentola* individuals was opportunistic while carrying seabirds monitoring on Rabo de Junco Islet, Baía da Murdeira Marine Natural Reserve, west of Sal (Fig. 1A), during 10–11 of June 2019 nights by two observers. Dorsal, ventral, and lateral photos of each individual on top of millimetric paper and of the toe lamellae were taken with a digital camera ([https://figshare.com/articles/figure/Tarentola\\_SalIsland\\_Cabo\\_Verde.jpg/20753086](https://figshare.com/articles/figure/Tarentola_SalIsland_Cabo_Verde.jpg/20753086)). Records were GPS-located (3m precision). Taxa identification was based on diagnostic characters described in Vasconcelos *et al.* (2012).



**Fig. 1.** Sample site and study object. **A)** Lateral, **B)** dorsal view of a *Tarentola* specimen and **C)** detail of its non-divided lamellas (photos by M. Hernández-Montero). **D)** Location of Sal Island and Rabo de Junco Islet, the site where the *Tarentola* individuals were found.

Seven individuals were found in the central and southeast part of the islet (Fig. 1A). All presented rounded to oval, smooth dorsal tubercles and no enlarged tubercles between the eye and ear opening. The dorsal pattern was not with butterfly- or X-shaped dark crossbands but with dark-brown lines or stains along a whitish vertebral line (Fig. 1B, C, D).

Based on the absence of enlarged tubercles referred above, we can exclude that the geckos are *Tarentola boavistensis* or *Tarentola maioensis* introduced from the

neighbour Boavista or Maio islands, respectively (Vasconcelos *et al.* 2012). They are not *Tarentola gigas* or *Tarentola protogigas* from the Desertas Islands or Fogo, Brava and Rombos, respectively, due to the small size of adults. They also present different dorsal pattern to *Tarentola* from the north-western islands (Vasconcelos *et al.* 2012). A genetic study of these individuals is urgently needed to determine whether it is a species found on other islands, an introduced species, or even a new undescribed species.

#### ACKNOWLEDGEMENTS

We thank MAVA Foundation and the Critical Ecosystems Partnership Fund for funding the seabird fieldwork and training on terrestrial reptiles. Special thanks to R. Vasconcelos for taxa identification, I. Abascal for sampling,

and Direcção Nacional do Ambiente and Sal's Ministério da Agricultura e Ambiente delegation for the permits (91/2018) and support.

## REFERENCES

- Angel, F. (1935) Lezards des îles du Cap Vert, rapportés par M. Le Professeur Chevalier. Description de espèces nouvelles. *Bulletin du Musée d'Histoire Naturelle*, 2, 165–169.
- Angel, F. (1937) Sur la faune hepétologique de l'Alchipel du Cap Vert. *XII Congrès International Zoologie, Lisbonne 1935*, 1693–1700.
- Arnold, E.N. & Ovenden, D. (2002) *A field guide to the reptiles and amphibians of Britain and Europe*. HarperCollins Publishers, London, UK, 272 pp.
- Uetz, P., Freed, P., Aguilar, R. & Hošek, J. (2022) *The Reptile Database*. Download from <http://www.reptile-database.org>, on 03/07/2022.
- Vasconcelos, R., Brito, J.C., Carranza, S. & Harris, D.J. (2013) Review of the distribution and conservation status of the terrestrial reptiles of the Cape Verde Islands. *Oryx*, 47, 77–87.
- Vasconcelos, R., Perera, A., Geniez, P., Harris, D.J. & Carranza, S. (2012) An integrative taxonomic revision of the *Tarentola* geckos (Squamata, Phyllodactylidae) of the Cape Verde islands. *Zoological Journal of the Linnean Society*, 164, 328–360.

Received 10 July 2022  
Accepted 31 August 2022