

## PSAMMODROMUS MICRODACTYLUS IS NOT EXTINCT

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The genus *Psammodromus* includes four species which live in Southwest Europe and Northwest Africa (Arnold 1989):

- *Psammodromus algirus*, the most widespread species, is found all over Mediterranean Maghreb (Tunisia, Algeria and Morocco), in most of Iberia, in Western Southern France (Languedoc and Roussillon) and in some mediterranean islands (particularly Conigli, near Lampedusa (Bohme 1981), Galita, Tunisia (Lanza and Bruzzone 1960), Isla Grossa, near Cartagena (pers. obs.) and Medes Islands, Spain (Pascual 1984)).
- *P. hispanicus*, a european species which inhabits the whole of Iberia and the south of France (Languedoc, Roussillon and Provence) (Salvador 1981).
- *P. blanci* is a Maghreban endemic, found only in the Hauts- Plateaux and the Atlas Tellien, from Northeast Morocco to Tunisia (Bons 1967, Welch 1982).
- *P. microdactylus*, endemic of Morocco, is very similar to *P. blanci*. It was known from a few localities in the Tingitan peninsula, Middle Atlas and Western High Atlas. The systematic relationships of these last two have often been questioned. Some authors have suggested that they could be conspecific (Doumergue 1901, Werner 1929, Mellado and Dakki 1988) or belong to the same super-species (Pasteur and Bons 1960).
- *P. microdactylus* is distinguished from *P. blanci* by minor differences of scalation, less contrasted pale lateral lines, and, especially, by the green colouration of the dorsal parts of the adults, a character which is not found in any other species of *Psammodromus* (see Plate 1).
- *P. microdactylus* was first described by Boettger in 1881 (*terra typica*: between Tanger and Tetouan (loc. 1). Since then, there have been few reliable records of this lizard (see Fig. 1).
- Tanger - Vaucher coll. in Boulenger 1889 (loc. 2).
- Tanger, 1902 - Mr. Buchet coll., collections of the Museum National d'Histoire Naturelle de Paris (loc. 2).
- Jbel Zalagh, near Fes - Werner 1931 (loc. 4)
- Sefrou - Werner 1931 (loc. 6).
- Taza - Werner 1931 (loc. 5).
- Azrou, (Middle Atlas), 1200m a.s.l. - Werner 1931 (loc. 9).
- Tadlest, 2250m a.s.l. (High Atlas) - Werner 1931 (loc. 12).

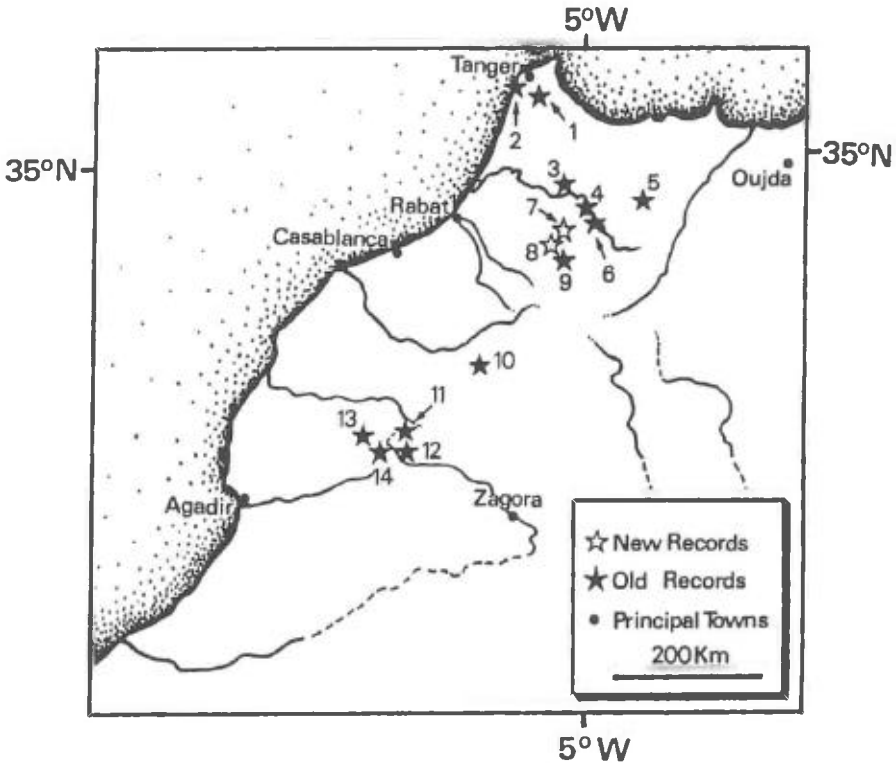


Fig. 1: Reliable published records of *Psammodromus microdactylus*. Localities listed in the text.

- Aremd (=Around), 1900m a.s.l. (High Atlas) - Werner 1931 (loc. 13).
- Jbel Tichka (High Atlas) - Werner 1931 (loc. 11).
- Western part of the Toubkal (High Atlas) - Lepiney 1938 (loc. 14).
- Between Afourer and Bin el Ouidane (High Atlas), circ. 1964 - Bons 1967 (loc. 10).
- Karia ba Mohammed, circ. 1964 - BONS 1967 (loc. 3).
- Balcon d'Ito, 1964 - Bons 1967 (Plate 1) (loc. 8).
- Photograph taken by Dr. Perret, without any indication of the locality, in Grzimek 1971.

Moreover, the observation by one of us (PG) of a specimen 5 km north of Dayet Ifrah was published earlier (Geniez et al. 1991), although the determination was considered as doubtful.

There had been no proven sightings since, despite active prospection (I. De Lay Riva, M. Geniez, Ph. Geniez, L. F. Lopez-Jurado, J.A. Mateo, J. Mellado, J.A. Valverde verbally). Consequently, the species has been supposed to be extinct (G. Pasteur verbally).

On 3rd October 1992, we caught and photographed 3 young specimens and saw an adult at the Balcon d'Ito (loc. 8), where we had already searched for this species in previous years, following the indications of J. Bons, but without success. All four



Plate 1: *Psammodromus microdactylus*, adult male, Balcon d'Ito (loc. 8), 1964. Photo Jacques Bons.

specimens were found sunning between 8 and 9 G.M.T., among tufts of Palmetto scrub (*Chamaerops humilis*) on stony calcareous slopes overgrazed by cattle, just east of the road P21 between Azrou and El Hajeb. The species seemed to be scarce at the time we were looking for it since we all three searched between 7 and 11 G.M.T. but found only four animals. The landscape was a plateau with few cultivated fields and large areas of short grass. This habitat in Morocco is called "erme" (cultivated erme) (Ionesco and Sauvage 1962).

The only other lacertid species found alongside *P. microdactylus* was *Acanthodactylus erythrurus atlanticus*. Other reptiles included *Agama bibroni*, *Macroprotodon cucullatus brevis*, *Coluber hippocrepis* and *Malpolon monspessulanus monspessulanus*. On the other side of the road, on a flat area with more grass and still a few *Chamaerops humilis*, we found *P. algerus*.

The same day, we saw another young *P. microdactylus* in a new location, along the road S310, 3 km north of El Hajeb (loc. 7). The habitat was a steep earthy slope with a dense cover of *Chamaerops humilis* on a small calcareous hill. *P. algerus* was found alongside.

Consequently, *P. microdactylus* should be searched for all over the plateau between Azrou, Fès and Immouzer du Kandar, specially among tufts of *Chamaerops humilis*, as well as in any area in Morocco where this plant grows. It may also be found in uniform areas of short plants (erme) (J. Bons verbally).

At present, we considered this species as rare and feel that, although it is not officially protected, it should not be collected except in very limited numbers for proper scientific studies. The first measure of protection that should be adopted is habitat conservation: preservation of areas of *Chamaerops humilis* against ploughing and overgrazing, but we must keep in mind that grazing is probably necessary to maintain the habitat as it is and give the best chance of survival to this rare endemic.

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