Acanthodactylus erythrurus (SCHINZ, 1833) Spiny-footed lizard Lagarto-de-dedos-denteados

Acanthodactylus erythrurus is distributed in Morocco, eastwards to the Mediterranean zone of Algeria, and in large parts of the southern and central Iberian Peninsula. It inhabits Portugal in scattered disjunct areas with very variable population densities:

- South Portugal: small populations on the Quaternary and Tertiary sand fields at Faro; records from the Ilha de Tavira (LESPARRE in litt. 2001) need to be verified, and the records from Carrapateira and Barragem de Arade (see MALKMUS & SCHWARZER 2000) must be viewed as based on misidentifications.

- Numerous, partly large-sized populations exist on the littoral and inland dunes of the Arrábida Peninsula, the câbedelo of Tróia, south to Areias Brancas, north of Sines advances into the Ribatejo (here on open sandy soil in sparse *Pinus* and cork oak forests), and southern foothills of Serra de Sto. António.

- Granitic rock castles in the environs of the Serra de São Mamede.

- A large area with partly dense populations extends as a band of 20 to 30 km in width along the Portuguese-Spanish border from Idanha-a-Velha to Torre de Moncorvo, including the surrounds of Carrezeda de Ansiães and reaching Rebordelo via Valpaços (here particularly on the western slopes of the Rio Rabaçal valley at Barreiros). Possibly



Fig. 164: Near Campelhos, Carrezeda de Ansiães region. Photograph by M. SCHROTH.

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connected to this distribution area are populations living on the southeastern foothills of the Serra de Bornes and at Picote, on the edge of the Douro canyon.

No records exist for the entire littoral zone north of the mouth of the Rio Tejo. The record from at Birre/Cascais mentioned by CEI (MALKMUS 1979a) could never be confirmed. A singular record exists from the hinterland near the coast from the region southeast of Ericeira (MARQUES et al. 1996), whereas the one from 'Pinhal da Sobreda/Leiría' (FERREIRA 1893a) could not be updated ever since.

All littoral localities lie in the thermo-Mediterranean, those from the inland in the meso-Mediterranean, zone. The spiny-footed lizard reaches the margins of the supra-Mediterranean zone only in the montane transition area between the Serra da Estrela and Serra da Malcata which, at the same time, represent the only localities nationwide that receive more than 900 mm of annual precipitation.

The spiny-footed lizard inhabits Portugal from near sea level to altitudes of 900 m (Serra do Reboredo), with a preference for elevations of 10-50 m in the littoral zone and 400-600 m farther inland. In Spain it has been recorded from altitudes of up to 1750 m (FERNÁNDEZ-CARDENETE et al. 2000: Pico de la Carne/Granada), in Morocco up to 2500 m (Bons & GENIEZ 1996).

Acanthodactylus erythrurus is a thermophilous lizard living in dry, sun-exposed situations of open to semi-open landscapes (vegetation cover of the ground usually < 40 %, i.e. dunes, sandy heaths, rock fields with xeromorphous shrubs and solitary trees), mainly with an undulating relief, but occasionally also more steep slopes of mountain spurs and river valleys. Of 42 localities examined 65 % of the populations dwelled on firm ground, and only 35 % lived in sandy areas like coastal and inland dunes. Of the localities with a 'firm ground' 60 % were situated on lapas, weakly domed granite armors with often more than 200 square meters of surface area, with very scattered groove vegetation (Sedum, Lavandula, Cistus), small accumulations of sediment (granite grit) in depressions, and sheety defoliations of rock lying flat on the ground; these were usually situated in rocky districts with an incline of < 30° (northeastern Serra de Marvão, Serra da Gardunha, at Figueira de Castelo Rodrigo, slopes of the valleys of the Rios Douro, Côa and Rabaçal). 40 % of the localities were recorded as trails traversing through garrigue, but occasionally also through dense, high macchia (e.g. Serra de Bornes), on scree and gravel banks on the banks of rivers, vineyard terraces, rubble dumps of mining operations (Serra do Reboredo), and fallow fields.

The populations of littoral dunes exhibit a preference for depressions between, and sunexposed slopes of, firm sand dunes that provide protection from the wind and are loosely overgrown with bushes (in particular *Corema, Ononis, Juniperus*; 20-40 % cover). The continuous chains of dunes between Tróia and Sines are, however, not inhabited continuously, and, corresponding with the highly variable degree of vegetation density, some populations are likely to be separated from others.

Owing to the fact that the habitats occupied by *Acanthodactylus erythrurus* are almost always of no economic importance for man, and that the lizard is largely true to its habitat and therefore is run over on roads only very occasionally, it is only threatened locally through massive alterations such as reforestation or the realization of tourism-related projects (e.g. on Tróia).

References: BARBADILLO et al. (1999), BOGAERTS (1990), CRESPO (1972, 1974a, 1975), CRESPO & OLIVEIRA (1989), DIAS et al. (1983), FERRAND DE ALMEIDA & FERRAND DE ALMEIDA (1986), FERRAND DE ALMEIDA et al. (2001), GODINHO et al. (1999), HÓDAR (1997), LOUREIRO et al. (1996), MALKMUS (1979a, b, 1981b, 1982a, 1984a, b, 1989a, b, 1990a, 1991c, 1993b, 1995a, 1997a, 1999a, b, 2002, 2002b, 2003a), MALKMUS & SCHWARZER (2000), MARQUES et al. (1995), MEEK (1983), PARGANA et al. (1996), PFAU (1988), RAIMUNDO (1995), SALVADOR (1981a).



Fig. 165: Rib. de Cordeira valley, near Figueira de Castelo Rodrigo. Photograph by R. MALKMUS.



Fig. 166: Portrait; Cordeira valley. Photograph by R. MALKMUS.



Fig. 166 a: southern slopes of Marvão (PN de Serra de São Mamede). Photograph by R. MALKMUS.