LACERTIDAE

This family includes about 27 genera and 250 species, occurring in Eurasia and Africa (except on Madagascar and in the Indo-Australian region). Characterized by "ecological plasticity", that allow this group to occupy a great variety of habitats, from the desert to high montane regions.

Legs are well developed. Pentadactylous. Presence of femoral pores. Long tail that can be autotomized and regenerate. Pupils are rounded and eyelids generally mobile. All the Italian species are oviparous except *Zootoca vivipara*, of which are known both ovoviviparous and oviparous populations.

Algyroides fitzingeri (Wiegmann, 1834)

Pigmy Algyroides · (Italian name: algiroide nano)

Very small lizard, relatively flat, tail long, generally uniformly dark colored. The coloration can be brownish, olive green, dark brown or blackish. Recently an individual entirely melanic has been observed in Sardinia (Castiglia, 2000). Capula et al. (2002) observed a light-brown or yellowish dorsal coloration in a population of the Gennargentu Massif, Sardinia. Ventral parts can be bluish, grey, yellowish or even orange. A vertebral stripe or black spots may be also present. Its dorsal and lateral rhomboid, sharp-shaped tiled scales are keeled and therefore it is very easy to distinguish the Pigmy Algyroides from the juveniles of the other sympatric species (*Podarcis tiliguerta*, *Podarcis sicula* and *Archaeolacerta bedriagae*). Total length about 12,5 cm while the SVL about 4 cm. No particular differences exist between the Sardinian and Corsican populations, even if the latter seem to be just a little bit bigger and characterized by a wider head.

Distribution, zoogeography and taxonomy: The Pigmy Algyroides is an endemic lizard of the Cyrno-Sardinian complex. Lanza (1983) suggest that the ancestor of this species was present on this complex before its separation from the continent (11,5–6 mybp, see Alvarez 1972; Alvarez et al., 1984). But, it is also possible that this lizard reached Corsica and Sardinia during the Messinian salinity crises (ca 5 mybp, when the Mediterranean basin dried up and many land bridges were created (Lanza, 1983; Böhme, 1993). Mayer & Lutz (1990) suggest that the differentiation between the Pigmy Algyroides and eastern species of this genus (*A. moreoticus* and *A. nigropunctatus*) can be dated about 16 mybp. Recent studies carried out on molecular systematics (Harris, 1999; Harris et al., 1999) did not clear the systematic relation of *A. fitzingeri* and the other *Algyroides*.

Besides the main islands of Sardinia and Corsica, this lizard has also been recorded on the following Sardinian satellite islands: Meridionale della Marmorata, Budelli, S.

Maria, Spargi, La Maddalena, S. Stefano, Chiesa, Caprera, Figarolo, Tavolara, S. Antioco, S. Pietro, Asinara (its presence on Molara is doubtful); and only on the Corsican satellite island of Gargalu (Delaugerre, 1983; Poggesi et al., 1996).

Whether in Corsica or Sardinia, the Pigmy Algyroides is widely distributed, from the coastal regions up to the mountain ranges, where the lizard seems to become less common. However, Capula et al. (2002) observed in a high altitude population of Sardinia a high population density. In Corsica, for example, it has been frequently observed in the *Quercus ilex* forest of Yeuse de Manso, and on the calcareous plateau of Bonifacio (Bodinier, 1981; Delaugerre & Cheylan, 1992). In Corsica, it is distributed up to 1400 m (Col de Salto), while in Sardinia it reaches 1800 m elevation (Gennargentu Massif). The species can be observed on rocks, stones, stone walls and shrubby habitats. It has also been observed being totally terrestrial and living on a grassy substratum (Capula et al., 2002).

The only subspecies described is *logudorensis* (Taddei 1952). Referred to the populations of northern Sardinia, but at present not considered as valid.

Biology and ecology: Not easy to be detected, when disturbed the lizard disappears rapidly. It lives on dry-stone walls, and in rocky and shrubby habitats. Following Keymar (1988), micro-climatic constraints, in particular when aridity prevails, could condition the presence of this species not able to tolerate excessive thermal stress. In den Bosch (1986) observed that the Sardinian Pygmy Algyroides feeds on spiders (32,8 %), Coleoptera (17,6 %), Diptera (8,2 %), Blattaria (7,1), Homoptera (5,8 %) and other invertebrates, while Capula & Luiselli (1994a) also report the consumption of spiders (40,4 %) as main prey, followed by ants (11,7 %) and flies (8,5 %). Eightysix adult individuals/ha have been observed (Capula et al., 2002) in a montane habitat of the Gennargentu Massif, Sardinia. Unfortunately the knowledge regarding the biology of this species is scarce. The 2–4 eggs are laid in May and June and hatching takes place from July to September.

Fig. 29: *Algyroides fitzingeri,* surroundings of Bonifacio, Corsica, France. R. Sindaco

Fig. 30: *Algyroides fitzingeri,* surroundings of Bonifacio, Corsica, France. R. Sindaco

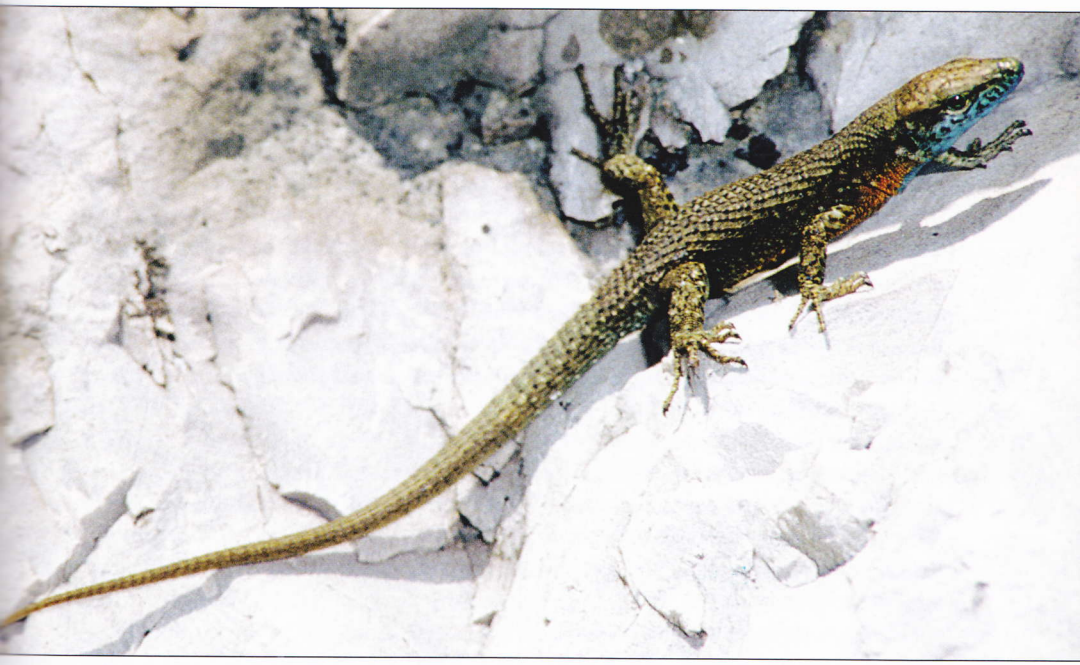

Fig. 35: *Algyroides nigropunctatus,* Val Rosandra, Trieste. R. Sindaco

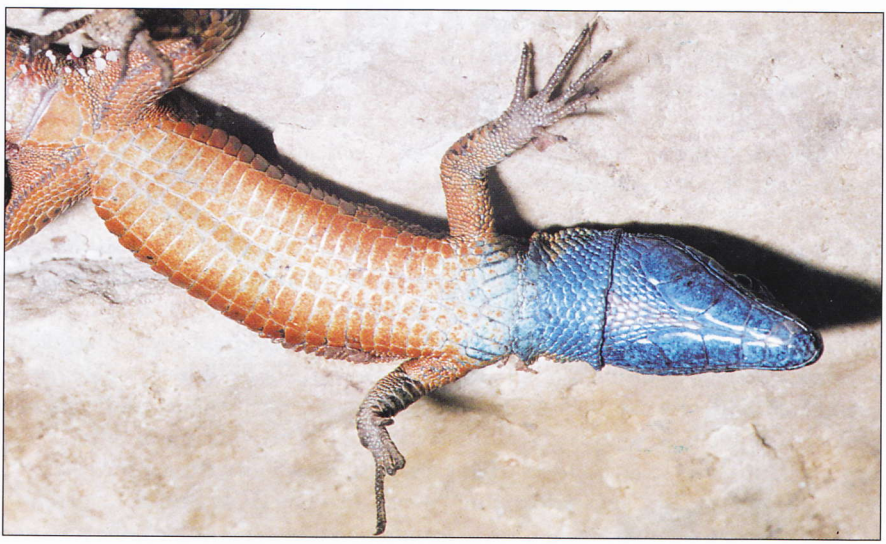

Fig. 36: *Algyroides nigropunctatus,* belly coloration, Cres Islands, Croatia. W. Böhme