

Podarcis filfolensis (BEDRIAGA, 1876)

Maltese Wall Lizard · (Italian name: lucertola maltese)

Medium-sized lizard, with small, smooth and scarcely flattened dorsal scales, sometimes slightly keeled. Collar scales with smooth posterior edge. Dorsal coloration variable, from grey to green or brown; ventral part from white to yellow, orange or reddish. The dorsal dark pattern prevails in the Pelagian Islands populations, characterized by light spots; also throat and belly are dark spotted. In adults of Lampione Islet (mainly in males) the reddish coloration of the belly is more intense than in the population of Linosa Island. Total length in adults about 20 cm, SVL 6.5 cm. Adult males of some small island populations reach 26–28 cm total length. Female are generally smaller. Despite the high variability of *Podarcis filfolensis*, no identification problems exist, being the unique lacertid present on these islands.

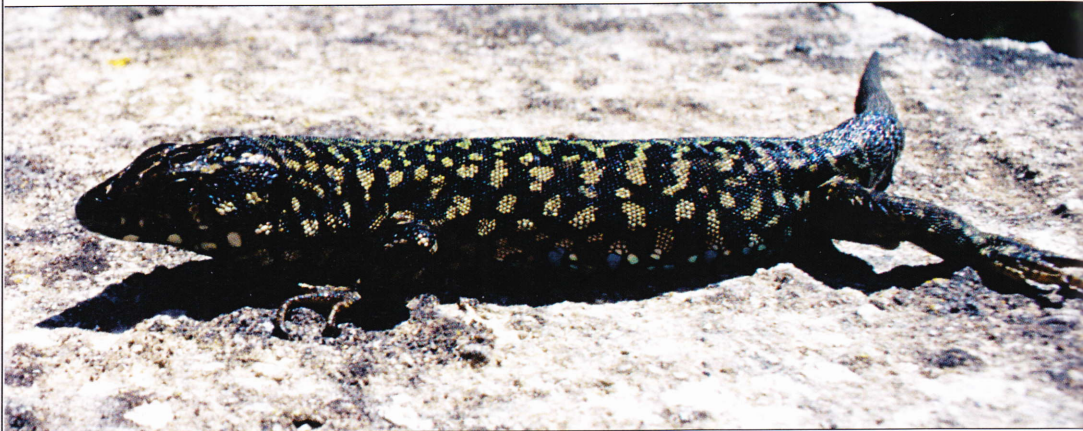


Fig. 54 + 55: *Podarcis filfolensis*, ♂, Lampione Island, Pelagian Islands, Sicily. Note the particular throat spotting in the upper photo.

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Fig. 56: *Podarcis filfolensis*, Malta.

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Fig. 57: *Podarcis filfolensis*, Malta.

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Distribution, zoogeography and taxonomy: Maltese Archipelago: Malta, Gozo, Kemma and on Selmunett (= St. Paul's Island), Kemma, Fungus (= General's Rock), Filfla, Blue Lagoon and Qawra Point islets (SAVONA VENTURA, 1983a; 1983b). Pelagic Islands: Linosa and Lampione (CORTI et al., 1998).

P. filfolensis is extremely widespread in the inhabited islands and occupies a great variety of habitats, from the coast to the dense Mediterranean maquis.

CAPULA (1994b), on the basis of electrophoretic analysis, found scarce differentiation among the different populations. The colonisation of the Pelagian Islands seem, therefore, to be relatively recent and due to passive introduction, considering that during the Quaternary the two island groups were never connected, and that Linosa exist only since 1 mybp (ROSSI et al., 1996). CAPULA (1994b) also indicate a high degree of similarity between *P. filfolensis* and *P. sicula*. On the contrary, recent molecular studies by HARRIS & ARNOLD (1999) show great affinity between *P. filfolensis* and a group of species named "Western Islands group", that include *P. tiliguerta* (Sardinia and Corsica) and the Balearic populations of *P. pityusensis* and *P. lilfordi*. OLIVERIO et al. (2000) repute *P. filfolensis* a sister-taxon of *P. wagleriana*. These results offer a new interesting view that needs to be related with the history and the palaeogeography of the involved regions.

Many subspecies of *P. filfolensis* have been described based on morphological characters that are extremely variable between the different island populations. Nowadays their taxonomic value is reputed as doubtful (see CAPULA, 1994b). The nominal form inhabits Filfla Islet; the other subspecies are *maltensis* MERTENS (1921) of Malta, Gozo, Kemma; *generalensis* (Gulia, 1914) of the Fungus Rock; *kieselbachi* (FEJÉRVÁRY, 1924) of Selmunett Rock; *laurentiimuelleri* (FEJÉRVÁRY, 1924) of Linosa and Lampione. The taxonomic status of the Kemma, Blue Lagoon and Qawra Point populations has not yet been studied (SAVONA VENTURA, 1983a; 1983b; SULTANA & FALZON, 1996).

Biology and ecology: On Linosa very high population density has been observed in the inner zones characterized by low *Pistacia lentiscus* maquis (56 individuals per 100 m²), while a lower density of lizards has been found in the coastal areas (DI PALMA, 1991). On islets, higher levels of density are reached, probably due to the scarce pres-



ence of predators. On Lampione Island in a habitat characterized by alo-nitrophilous vegetation dominated by *Lavatera arborea*, *P. filfolensis* is syntopic with *Chalcides ocellatus*. Up to 75–80 individuals per 100 m² have been observed (P. LO CASCIO, unpubl. data). This sounds particularly interesting if we consider that on this small island about 230–250 nesting pairs of Yellow-Legged Gull (*Larus cachinnans*) have been recorded. These are reputed by many authors as potential predators of lizards, even if lizards remains have never been found in their stomach pellets. On Linosa FORNASARI & ZAVA (2001) observed the Sparrow *Passer hispaniolensis* predated lizards.

Continuous winter latency has never been observed on Malta (DESPOTT 1915; LANFRANCO, 1955) and the lizards seem to be inactive only during rainy days.

The diet of Linosa population is mainly based on Formicidae (in faecal pellets: 18.7 %; in stomach contents: 12.1 %), Coleoptera (21 %; 46.5 %) and vegetable matter (16.1 %; 11.5 %) (SORCI, 1990). The consumption of vegetable matter (flowers, leafs, dried fruits of *Lavatera arborea*) has also been frequently observed in the Lampione population (P. LO CASCIO, unpubl. data). The Maltese Wall Lizard is clearly generalist, trying to feed on as many food items as possible. As well-known micro-insular habitats are characterized by chronic low food availability. SORCI (1990) frequently observed cannibalism, probably mainly on juveniles. The high number of individuals with regenerated tails (about 65 % of the entire population), observed on Lampione, could be related to competitive behavior, taking also in account that on this islet potential predators are lacking. Mating period take place in spring. Clutch size 1–2 eggs (DESPOTT, 1915; SULTANA & FALZON, 1996). In captive specimens, MORAVEC (1993) observed up to two clutches per year, average clutch size 3–4 eggs of 10–14,5 x 6–8 mm. MORAVEC also observed oophagy with a female eating its own egg. This can occasionally happen with scarce food availability.