

## Complete albinism in a *Podarcis muralis* newborn

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**Abstract.** The authors describe a case of complete albinism in a *Podarcis muralis* newborn, from Chieti (Abruzzo, central Italy) in September 2004. This is the first complete albinism case in a *Podarcis* spp. in the world.

**Keywords.** *Podarcis muralis*, albinism, morphology.

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Albinism is a genetic anomaly caused by the absence of the tyrosinase enzyme, which is necessary for the synthesis of melanin (recessive gene), resulting in the absence of pigment in the skin, the iris (red color of the eyes) and the choroid. The albinos (homozygotes) of a visibly weaker constitution, have notably sun-sensitive skin (heliophobic), causing them much difficulty during their growth due to the impossibility of exposure to UV rays.

Cases of albinism reported for European reptiles are very few. None of them has been recorded in Italy regarding lizards, and albinism has been recorded only in a few snakes: the first one dates back to 1878 (Pirotta, 1878) and the most recent for the colubrid *Zamenis longissimus longissimus*, which lacked absolutely melanin, and showed the characteristic light skin and red eyes (Ferri and Bettiga, 1992), and for *Hierophis viridiflavus* (Scali, 1992). Concerning records of albinism in European lizards, cases of albinism have been reported for *Timon lepidus* (Arribas and Cliville, 1994), *Gallotia caeasaris gomeriae* (López-Jurado and Mateo, 1998), *Euleptes europaea* (Delaugerre, 1981), *Anguis fragilis* (Robert et al., 1965), and *Podarcis muralis* (Fontanet and Matallanas, 1985).

Outside of Europe, cases of albinism have been found in *Eumeces fasciatus* (Brungs et al., 1960), *Phrynosoma coronatum blainvillii* (Shaw, 1963), *Sceloporus undulatus hyacinthinus* (Hensley, 1968), *Corytophanes hernandezii* (Pérez-Higareda, 1980), *Tiliqua* sp. (O'Shea and Kent, 1988), *Ctenosaura similis* (Mora, 1990), *Carlia bicarinata* (O'Shea, 1993), *Sauromalus obesus* (Beaman et al., 2003), *Varanus kingorum* (Eidenmüllser, 2003).

Our work reports the first case of complete albinism in a newborn *Podarcis muralis* found in the Province of Chieti (Abruzzo, central Italy), in September 2004. It was about 6 cm long and had a light yellow skin over a completely white background and red eyes. It was born in 2004, and seemed undernourished, but not sick at first glance.

The site of collection is located in a hilly zone (altitude: 180 m a.s.l.) between the Sangro and Aventino. The most common vegetation is swamps with an extensive reed thicket with *Typha laxmanni*, *Epipactis palustris*, *Alnus glutinosa*, and *Quercus pedunculata*.



**Fig. 1.** The newborn albino *P. muralis* found near Chieti.



**Fig. 2.** Dorsal view of the above individual.

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