

## Extreme feeding behaviours in the Italian wall lizard, *Podarcis siculus*

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**Abstract.** In the present paper the occurrence of cannibalism, unusual predation on small reptiles [*Hemidactylus turcicus* (Reptilia, Gekkonidae)], and foraging on small mammal carrion [*Suncus etruscus* (Mammalia, Soricidae)] by *P. siculus* is reported.

**Keywords.** *Podarcis siculus*, feeding behaviour, predation, Italy.

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*Podarcis siculus* (Rafinesque-Schmaltz, 1810) is a lacertid lizard occurring in Italy and in the northwestern Balkan Peninsula (Corti and Lo Cascio, 2002; Corti, 2006). This lizard is an opportunistic species characterized by broad ecological tolerance and high spreading capacity (Nevo et al., 1972; Gorman et al., 1975). *Podarcis siculus* can be considered as an active forager and a generalist predator (Kabisch and Engelmann, 1969; Pérez-Mellado and Corti, 1993). It preys upon a wide variety of invertebrates, mainly on arthropods (Arachnidae, Insects larvae, Diptera, Coleoptera, Heteroptera, Hymenoptera, Orthoptera, Gastropoda; see e.g. Capula et al., 1993; Rugiero, 1994; Corti and Lo Cascio, 2002; Bonacci et al., 2008; Corti et al., in press), but occasionally small vertebrates can be also preyed (Sorci, 1990; Sicilia et al., 2001). Its feeding behaviour seems to be opportunistic, as indicated by the consumption of different preys in different habitats and/or geographic areas: e.g. the dominant preys are Diptera and Isopoda on the Formica di Burano Islet (Italy); spiders and Coleoptera on Menorca, (Balearic Islands); larvae of insects and ants on the Sparviero islet (Italy) (Pérez-Mellado and Corti, 1993); Coleoptera on Sicily (Sorci, 1990); ants, afids and vegetable matter on the Vivaro di Nerano Islet (Italy) (Ouboter, 1981); Diptera and larvae of Lepidoptera in a urban park (Rome, Italy) (Capula et al., 1993); Isopoda in a coastal dune habitat of central Italy (Rugiero, 1994). Although being a typical insectivorous lacertid lizard, *P. siculus* can also feed on a significant amount of plant matter on some Mediterranean islands (see e.g. Ouboter, 1981; Pérez-Mellado and Corti, 1993; Cooper and Vitt, 2002; Herrel et al, 2008). This behaviour is shared with several other species of the family

Lacertidae occurring on Mediterranean islands (Capula and Luiselli, 1994; Pérez-Mellado and Traveset, 1999; Van Damme, 1999). Cannibalism seems to be rare and uncommon (e.g. Ouboter, 1981; Rugiero, 1994; Henle, 1988; Burke and Mercurio, 2002). As to cases of predation on small vertebrates, the only available literature data refer to the predation of two small individuals *Discoglossus pictus* (Sicilia et al., 2001), and to undeterminate vertebrate preys observed in the faecal pellets of adult *P. siculus* (Sorci, 1990).

In the present paper the occurrence of cannibalism and unusual predation on small vertebrates by *P. siculus* is reported. In the first case it was possible to observe a large male *P. siculus* preying upon a juvenile of the same species. This case of cannibalism was observed on 26 September, 2006, at 0930 h a.m., on the side of a dry wall close to the small village Fiumefreddo Bruzio (Province of Cosenza, Calabria, southern Italy). The male *P. siculus* captured the juvenile by hardly biting on the hips of the small lizard. In the second case it was possible to record a female *P. siculus* preying upon a juvenile *Hemidactylus turcicus* (Reptilia, Gekkonidae). Predation was observed on 20 August 2003, at 0200 h p.m., on the wall of an old building in the historical centre of Fiumefreddo Bruzio village (Province of Cosenza, Calabria, southern Italy). It was also possible to take a picture of this unusual case of predation (see Fig. 1). This is the first documented case of predation on a gekkonid lizard by *P. siculus*. In the third case, a large male *P. siculus* was observed and photographed feeding upon a carrion of an adult *Suncus etruscus* (Mam-



**Fig. 1.** Female *Podarcis siculus* preying upon a juvenile *Hemidactylus turcicus* (Fiumefreddo Bruzio, Province of Cosenza, Calabria, southern Italy). Photo by Gaetano Aloise.



**Fig. 2.** Male *Podarcis siculus* feeding upon a carrion of an adult *Suncus etruscus* (Torchiara, Province of Salerno, Campania, southern Italy). Photo by Bruno Cignini.

malia, Soricidae) (see Fig. 2). Foraging on carrion was recorded on 16 June 2004, at 1030 h a.m., on one side of a dry wall surrounding a private house garden in the village of Torchiara (Province of Salerno, Campania, southern Italy). This is the first documented case of foraging on small mammal carrion by *P. siculus*.

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