

## A case of cannibalism in *Podarcis siculus campestris* De Betta, 1857 (Reptilia, Lacertidae)

Mauro Grano<sup>1</sup>, Cristina Cattaneo<sup>2</sup> & Augusto Cattaneo<sup>3</sup>

<sup>1</sup> Via Valcenischia 24 – 00141 Roma, Italy; e-mail: elaphe58@yahoo.it - <sup>2</sup> Via Eleonora d'Arborea 12 – 00162 Roma, Italy; e-mail: cristina.cattaneo76@libero.it - <sup>3</sup> Via Cola di Rienzo 162 – 00192 Roma, Italy; e-mail: augustocattaneo@hotmail.com

---

**ABSTRACT** A case-report of cannibalistic behaviour in Italian wall lizard *Podarcis siculus campestris* De Betta, 1857 is described here along with the first photographic record

**KEY WORDS** Cannibalism, food spectrum, Italian wall lizard, *Podarcis siculus*, predation.

Received 25.09.2011; accepted 29.09.2011; printed 30.09.2011

---

### INTRODUCTION

*Podarcis siculus* (Rafinesque-Schmaltz, 1810) s.l. is considered among the Mediterranean Lacertid lizards the species more adapted to inhabit a wide variety of habitats (Corti et al., 2011). The distribution area of *P. siculus* includes Italy, Corsica and the coastal regions of Croatia, Slovenia and Montenegro.

Naturalized populations have been found in Spain and Balearic Islands, Portugal, France, Turkey, Tunisia, Libia and United States. This highly polytypic species is represented in Lazio by ssp. *campestris* De Betta, 1857 (Capula & Ceccarelli, 2003).

In Italy, this lizard generally occurs in low-land and coastal areas, and also in anthropized areas such as urban park of large towns. It is found from sea level up to 1000 m and exceptionally up to 2200 m (Mount Etna, Sicily) (Turrisi & Vaccaro, 2001; Corti et al., 2011).

This species is often sympatric with *Podarcis muralis* (Laurenti, 1768), occupying sunny and more exposed microhabitats respect to this latter; also, no interspecific competition seems to occur between these species (Bologna et al., 2007). However, in some urban environments has been observed as the communities of

*Podarcis muralis* e *P. siculus* are organized through specific ecological needs of each species rather than by species interactions (Capula et al., 1993).

Many studies have focused the feeding habits of *P. siculus*; the results showed that its preys spectrum can be interested by significant variations in relation to the different environmental contexts (Corti & Lo Cascio, 2002). It preys upon invertebrates and mainly insects, but occasionally vegetal matter and small vertebrates can complete the diet. Some studies have showed that most of Italian Lacertids eat really all the occurring invertebrates in their habitats in proportion on their availability (Scali et al., 2008).

Other studies (Lo Cascio & Capula, 2011) on *Podarcis raffonei* (Mertens, 1952) from Scoglio Faraglione (Aeolian Archipelago, NE Sicily) indicate that diet composition is not directly influenced by prey availability and temporal prey abundance and that this species can operate a hierarchical choice within the range of prey items constituting its prey spectrum.

Several cases of partial and/or true cannibalism have been reported in literature for this species (see e.g. Mertens, 1934; Kramer, 1946; Ouboter, 1981; Burke & Mercurio, 2002).

## RESULT AND CONCLUSIONS

On 17<sup>th</sup> July 2011, at 10.46 a.m. on Tolfa's Mountains, Lazio (Italy), two of the Authors have surprised and photographed an adult male of Italian wall lizard during predation against a young conspecific. After attacking the small lizard on hind legs, limiting its mobility and preventing its escape, the predator carried away the prey in order to consume it hidden in a near bush (Fig. 1).

Recently, Cattaneo (2005) stated adult *Podarcis siculus* feed on the eggs and young of the same species and also the congener *Podarcis muralis nigriventris* Bonaparte, 1836; Capula & Aloise (2011) reported two unusual cases of predation, respectively, of a young conspecific and of a small-sized gecko *Hemidactylus turcicus* (Linnaeus, 1758); in the same paper is also given the photo of a *P. siculus* retaining in the mouth a dead specimen of *Suncus etruscus* (Savi, 1822) (Mammalia, Soricidae).

The observation contained in this work is a further contribution to the knowledge of cannibalism in *Podarcis siculus* and allows to confirm both the reports by Cattaneo (2005) and also by Capula & Aloise (2011).



Figure 1. Specimen of *Podarcis siculus campestris* (adult male) to prey a young of the same species (Tolfa's Mountains, Lazio, Italy, July 2011).

## REFERENCES

- Bologna M.A., Salvi D. & Pitzalis M., 2007. Atlante degli Anfibi e dei Rettili della Provincia di Roma. Provincia di Roma, Gangemi Editore, Roma, 192 pp.
- Burke R.L. & Mercurio R.J., 2002. Food habits of a New York population of Italian Wall Lizard, *Podarcis sicula* (Reptilia, Lacertidae). *American Midland Naturalist*, 147: 368-375.
- Capula M. & Aloise G., 2011. Extreme feeding behaviors in the Italian wall lizard, *Podarcis siculus*. *Acta Herpetologica*, Firenze University Press, 6: 11-14.
- Capula M. & Ceccarelli A., 2003. Distribution of genetic variation and taxonomy of insular and mainland populations of the Italian wall lizard, *Podarcis sicula*. *Amphibia-Reptilia*, 24: 483-495.
- Capula M., Luiselli L. & Rugiero L., 1993. Comparative ecology in sympatric *Podarcis muralis* and *P. sicula* (Reptilia: Lacertidae) from the historical centre of Rome: what about competition and niche segregation in an urban habitat? *Bollettino di Zoologia*, 60: 287-291.
- Cattaneo A., 2005. L'Erpetofauna della Tenuta Presidenziale di Castelporziano (Roma). *Atti del Museo di Storia Naturale della Maremma*, 21: 49-77.
- Corti C. & Lo Cascio P., 2002. The Lizards of Italy and Adjacent Areas. Chimaira Verlag, Frankfurt am Main, 165 pp.
- Corti C., Biaggini M. & Capula M., 2011. *Podarcis siculus* (Rafinesque-Schmaltz, 1810). In: Capula M., Luiselli L., Razzetti E., Sindaco R. (eds.), *Fauna d'Italia: Reptilia*, Vol. XLV. Edizioni Calderini de Il Sole 24 ORE, Editoria Specializzata S.r.l., Bologna: 407-417.
- Lo Cascio P. & M. Capula, 2011. Does diet in lacertid lizards reflect prey availability? Evidence for selective predation in the Aeolian wall lizard, *Podarcis raffonei* (Mertens, 1952) (Reptilia, Lacertidae). *Biodiversity Journal*, 2011, 2: 89-96.
- Kramer G., 1946. Veränderungen von Nachkommensziffer und achlommengrößen sowie der Alters-verteilung con Inseleidechsen. *Zeitschrift für Naturforschung*, 1: 700-710.
- Mertens R., 1934. Die Inselreptilien, ihre Ausbreitung, Variation und Artbildung. *Zoologica*, 32: 1-209.
- Ouboter P.E., 1980. The ecology of the island lizard *Podarcis sicula salffi*: correlation of microdistribution with vegetation coverage, thermal environment and food size. *Amphibia-Reptilia*, 2: 243-257.
- Scali S., Spadola F., Di Toro F., Gentili A., Mangiacotti M., Tettamanti S. & Cavigioli L., 2008. Plasticità trofica di due Lacertidi italiani: casi di predazione anomala in *Lacerta bilineata* e *Podarcis muralis*. In: Corti C. (ed.), *Herpetologia Sardiniae*. Societas Herpetologica Italica, Edizioni Belvedere, Latina: 435-438.
- Turrisi G. F. & Vaccaro A., 2001. Distribuzione altitudinale di Anfibi e Rettili sul Monte Etna (Sicilia orientale). *Atti 3° Congresso Nazionale di Erpetologia*. Pianura, 13: 335-338.