

Podarcis siculus (Rafinesque- Schmaltz, 1810) as a slug hunter (Squamata; Lacertidae): A case record from western Black Sea region of Turkey

Pedram Türkoğlu¹

¹ Hatay Mustafa Kemal University, Tayfur Ata Sökmen Faculty of Medicine, Department of Anatomy, Tayfur Sökmen Campus, TR-31060, Antakya, Hatay, Türkiye

0000-0002-6622-3237
pedram.heravy@gmail.com

Accepted for publication 11.05.2023 Published online 12.07.2023

Abstract

In this brief paper, we give some photographs and observations on the slug hunting of *Podarcis siculus* (Rafinesque-Schmaltz, 1810), a member of the Lacertidae, from Zonguldak, a province in western Turkey near the Black Sea.

Keywords: lizard, diet, prey

Öz

Bu kısa makalede, Lacertidae familyasının bir üyesi olan *Podarcis siculus* (Rafinesque-Schmaltz, 1810)'un Türkiye'nin batısında Karadeniz'e yakın bir il olan Zonguldak'taki sümüklüböcek avcılığına ilişkin bazı fotoğraf ve gözlemlere yer verilmektedir.

Anahtar kelimeler: kertenkele, diyet, av

1. Introduction

The Lacertidae family is classified below the Squamata order, which is the largest order of reptiles. Lacertid lizards, also known as wall lizards or true lizards, are native to Afro-Eurasia.

It is a diverse family with about 362 species in 42 genera. They represent the dominant group of lizards found in Turkey. According to the latest online checklist, the genus *Podarcis* (Wagler, 1830) which belongs to the Lacertidae family, comprises 27 currently recognised species (World Lacertidae Phylogeny, 2023).



Podarcis siculus (Rafinesque- Schmaltz, 1810), also known as Italian wall lizard, originated throughout the Italian mainland and ranges through surrounding islands and distant countries. It's colour varies from green to brown. Mainland species have reticulated green patches on the dorsal side. In males, at most half of the outer ventral scales are blue. Undersides are usually unspotted and whitish or greenish (Speybroeck et al., 2016).

As a generalist predator, the *P. siculus* diet consists of a broad variety of invertebrates, mainly arthropods. *P. siculus* feeds on small vertebrates and plants as well (Bonacci et al., 2008). There is also a distinctness in diet between the sexes, with males having a more diverse diet than females. Also, insular populations of *P. siculus* do consume a greater percentage of plant matter as a part of their diet (Taverne et al., 2019). To refer to the extraordinary observation records, it is known that it fed on a dead adult Etruscan shrew (*Suncus etruscus*) and a juvenile Mediterranean house gecko (*Hemidactylus turcicus*) (Capula & Aloise, 2011). Also, there have been reports of cannibalism (Grano et al., 2011). The extensive diet of the species also influences its evolutionary success.

2. Materials and methods

This observation was photographed with a Nikon D5300 DLSR camera body and a Tamron 150-600 mm G1 telephoto lens from Filyos Castle, Çaycuma district, Zonguldak province, Turkey. Coordinates are 41°34'26.6"N, 32°02'07.8"E, 15:35 PM GMT +03:00, April 30, 2023.

3. Results and Discussion

In this report, we provide a direct observation of a male *P. siculus* hunting a *Deroceras* sp. land slug (Fig. 1). After catching it, the lizard dropped the slug from its mouth (Fig. 2). The lizard disappeared after chasing the fallen slug. It is clearly visible that the tissue of the slug is damaged. This shows that the lizard has been chewing the slug for some time and trying to keep it in its mouth. As seen, Filyos Castle has an important role in the breeding and feeding area of the *P. siculus*.



Figure 1. An adult male Podarcis siculus hunted a Deroceras sp..





Figure 2. Dropped the slug from its mouth and went after the fallen slug.

Acknowledgments: I would like to express my gratitude to Kadir Boğaç Kunt, the secretariat of Acta Zoologica Cypria, for his contributions and ideas prior to publication. I would like to thank Bernhard Hausdorf, the curator of molluscs at the Zoological Museum Hamburg in Germany, for the identification of the land slug.

References

Baran, İ., Avcı, A., Kumlutaş, Y., Olgun, K., & Ilgaz, Ç. (2021). Türkiye Amfibi ve Sürüngenleri. Palme Yayınevi, 130 sf.

- Bonacci, T., Capula, M., Brandmayr, T. Z., Brandmayr, P., & Aloise, G. (2008). Testing the predatory behaviour of *Podarcis* sicula (Reptilia: Lacertidae) towards aposematic and non-aposematic preys. *Amphibia-Reptilia*, 29: 449-453.
- Capula, M., & Aloise, G. (2011). Extreme feeding behaviours in the Italian wall lizard, *Podarcis siculus*. Acta Herpetologica, 6 (1): 11–14.
- Grano, M., Cattaneo, C., & Cattaneo, A. (2011). A case of cannibalism in *Podarcis siculus* campestris De Betta, 1857 (Reptilia, Lacertidae). *Biodiversity Journal*, 2(3): 151-152.
- Henle, K. & Klaver, C.J.J. (1986). *Podarcis sicula* (Rafinesque-Schmaltz, 1810) Ruineneidechse. S. 254 342 in Böhme, W. (Hrsg.): Handbuch der Amphibien und Reptilien Europas, Echsen III (Podarcis). Aula-Verlag, Wiesbaden, 434 p.
- Ilgaz, Ç., Y. Kumlutaş, & Sözen, M. (2013). New locality record for *Podarcis siculus hieroglyphicus* (Berthold, 1842) (Squamata: Lacertidae) in the western Black Sea region of Anatolia. *Turkish Journal of Zoology*, *37*(1): 123–127.
- Speybroeck, J., Beukema, W., Bok, B., & Van Der Voort, J. (2016). Field Guide to the Amphibians & Reptiles of Britain and Europe. British Wildlife Field Guides Bloomsbury, 432 p.
- Taverne, M., Fabre, A-C., King-Gillies, N., et al. (2019). Diet variability among insular populations of *Podarcis* lizards reveals diverse strategies to face resource-limited environments. *Ecology and Evolution*, *9*(22): 12408–12420.
- Tok, C.V., Çiçek, K., Hayretdağ, S., Tayhan, Y., & Yakın, B.Y. (2015). Range extension and morphology of the Italian wall lizard, *Podarcis siculus* (Rafinesque-Schmaltz, 1810) (Squamata: Lacertidae), from Turkey. *Turkish Journal of Zoology*, *39*(1): 103–109.



- Türkoğlu, P. (2022). Distribution extension for *Podarcis siculus* (Rafinesque-Schmaltz, 1810) (Squamata: Lacertidae), from Turkey. *L@CERTIDAE* (Eidechsen online), *2023*(2): 14–21.
- Wiktor, A. (2007). A check-list of terrestrial slugs of Turkey with some new data and a description of a new species (Gastropoda terrestria nuda). *Folia Malacologica*, *15*(3), 95-117.

World Lacertidae Phylogeny (2023). L@CERTIDAE. Retrieved from https://lacerta.de/AS/Lacertidae.php.

Yıldırım M. Z. & Kebapçı, Ü. (2004). Slugs (Gastropoda: Pulmonata) of the Lakes Region (Göller Bölgesi) in Turkey. *Turkish Journal of Zoology*, 28: 155–160.

