

First record of *Callistochiton pachylasmae* (Monterosato, 1879) for the Adriatic Sea (Polyplacophora Callistoplacidae)

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ABSTRACT It is reported the first record of *Callistochiton pachylasmae* (Monterosato, 1879) for the Adriatic Sea. It is a very rare and peculiar polyplacophoran species (Callistoplacidae Pilsbry, 1893). Actually, the few known records span a wide Mediterranean range and extend to the neighbouring Atlantic.

KEY WORDS *Callistochiton pachylasmae*; polyplacophoran species; first record; Adriatic Sea.

Received 17.01.2016; accepted 09.02.2016; printed 30.03.2016

INTRODUCTION

Callistochiton pachylasmae (Monterosato, 1879) (original combination: *Chiton pachylasmae* Monterosato, 1879 ex Seguenza G. ms) is a very peculiar polyplacophoran species (Callistoplacidae Pilsbry, 1893: Bouchet et al., 2016; Gofas & Le Renard, 2016), easily recognizable by its peculiar sculpture, in particular for the presence of 7 radial ridges on the cephalic plate. Its distinctiveness, along with its apparently isolated fossil history in Europe, traced back to at least the Pleistocene (Dell’Angelo et al., 1998), brought Dell’Angelo & Oliverio (1997) to allocate it in a subgenus on its own: *Allerychiton* Dell’Angelo et Oliverio, 1997.

DISCUSSION AND CONCLUSION

Callistochiton pachylasmae is a rare species, and it has been treated seldom in the literature (Monterosato, 1879; Sabelli, 1971; Ferreira, 1979;

Kaas, 1981; van Belle, 1983, 1988; Gaglini, 1985; Pizzini & Oliverio, 1993; Giovine & Dell’Angelo, 1993; Kaas & van Belle, 1994; Dell’Angelo & Oliverio, 1997; Dell’Angelo et al., 1998; Antoniadou et al., 2005; Koukouras, 2010). The few known records span a wide Mediterranean range and extend to the neighboring Atlantic (Fig. 1). It is noteworthy that the generic record from Spain in the Iberian Fauna Databank (Ramos, 2010) could not be linked to an actual, published record (J. Templado, pers. comm.) and therefore could not be plotted in the map (Fig. 1). However, despite the wide range, there was so far remarkable lack of findings in the Adriatic Sea.

The present record consists of a single cephalic plate, 0.82 x 1.37 mm (Fig. 2), retrieved by sorting a sample of bioclastic sediment with limited organogenous component, collected by SCUBA diving at Lastovo Island (Croatia), 38 m depth (Alessandro Raveggi, Florence, legit). This is the first record from the Adriatic Sea, and represents the northernmost known record for the species.

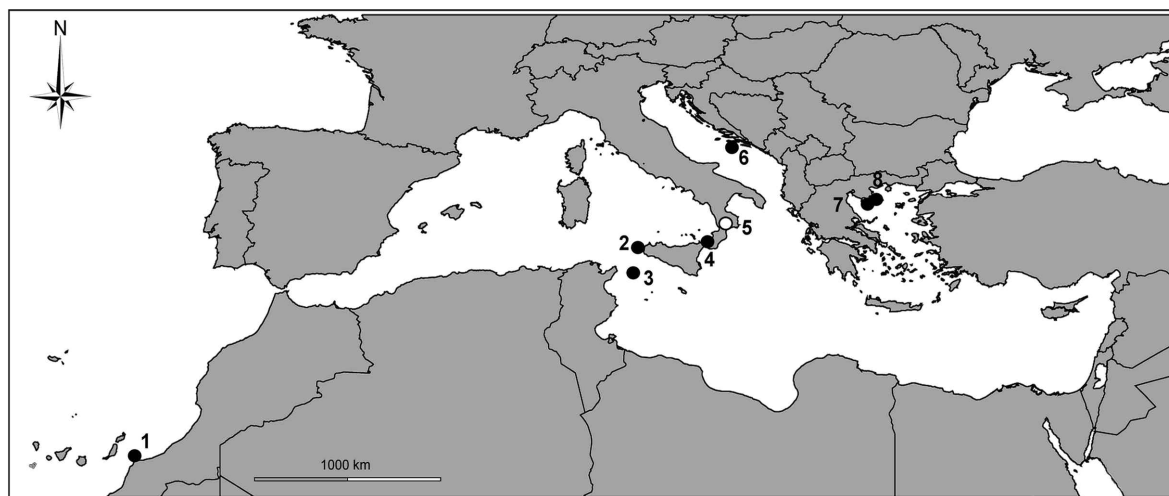


Figure 1. Known records of *Callistochiton pachylasmae* (Monterosato, 1879). 1) W of Cape Yubi, Morocco, -500 m, 1 specimen now lost (Kaas, 1981). 2) Punta Longa “Secca Galera”, Favignana Island -33 m, 1 cephalic plate (Dell’Angelo & Oliverio, 1997). 3) Pantelleria Island, -53.4 m (Pizzini & Oliverio, 1993). 4) Strait of Messina, coralligenous, 1 specimen (holotype: Monterosato, 1879). 5) S. Maria di Catanzaro, Pleistocene, 1 cephalic plate (Dell’Angelo et al., 1998). 6) Lastovo Island (Croatia), -38 m (this work). 7) Kelyfos Island, -30 m, 1 specimen (Antoniadou et al., 2005; Koukouras, 2010). 8) Ormos Panagias -35/40 m, Sithonia, 1 intermediate plate (Dell’Angelo & Oliverio, 1997).



Figure 2. *Callistochiton pachylasmae* (Monterosato, 1879). Lastovo Island (Croatia), 38 m depth. Cephalic plate, height 0.82, width 1.37 mm.

REFERENCES

- Antoniadou C., Koutsoubas D. & Chintiroglou C.C., 2005. Mollusca fauna from infralittoral hard substrate assemblages in the North Aegean Sea. *Belgian Journal of Zoology*, 135: 119–126.
- Belle R.A. van, 1983. The Systematic Classification of the Chitons. *Information de la Société Belge de Malacologie*, Sér. 11 (1–3): 1–178.
- Belle R.A. van, 1988. De Europese keverslakken (Polyplacophora) [The European Polyplacophora]. *Vita Marina Jan.-Mrt*: 9–132 (look up in IMIS).
- Bouchet P., Marshall B., Schwabe E. & Gofas S., 2016. *Callistochiton* Dall, 1879. In: *MolluscaBase* (2016). Accessed through: World Register of Marine Species at <http://www.marinespecies.org/aphia.php?p=taxdetails&id=138084> on 2016-01-04
- Dell’Angelo B. & Oliverio M., 1997. A new polyplacophoran subgenus for the Northeast Atlantic (Ischnochitonidae: Callistoplacinae). *Bollettino Malacologico*, 32: 145–150.
- Dell’Angelo B., Vazzana A. & Bertolaso L., 1998. Ritrovamento di piastre fossili di *Callistochiton* (Mollusca: Polyplacophora) nel Plio-Pleistocene della Calabria. *Bollettino Malacologico*, 33 (1997): 139–140.
- Ferreira A.J., 1979. The Genus *Callistochiton* Dall, 1879 (Mollusca: Polyplacophora) in the Eastern Pacific, with the Description of a New Species. *The Veliger*, 21: 444–466.
- Gaglioli A., 1985. Classe Anphineura. In: Settepassi F., *Atlante Malacologico. I Molluschi Marini viventi nel Mediterraneo*. Roma, Vol. III., 19 pp., 13 tav.
- Giovine F. & Dell’Angelo B., 1993. Elenco dei Molluschi rinvenuti nello Stretto di Messina. *Polyplacophora. Lavori S.I.M. 24, III Congresso S.I.M.*, Parma 1990: 157–170.
- Gofas S. & Le Renard J. (Eds.), 2016. CLEMAM: Check List of European Marine Mollusca. Available from

- <http://www.somali.asso.fr/clemam/biotaxis.php?X=10251&header=1> on 2016.01.02.
- Kaas P., 1981. Chitons (Mollusca, Polyplacophora) procured by the CANCAP I-VII expeditions, 1976–1986. *Zoologische Mededelingen*, 65: 89–98.
- Kaas P. & van Belle R.A., 1994. Monograph of living chitons. Vol. 5, Additions to Volumes 1–4.
- Koukouras A., 2010. Checklist of marine species from Greece. Aristotle University of Thessaloniki. Assembled in the framework of the EU FP7 PESI project.
- Monterosato T.A. di Maria di, 1879. Enumerazione e sinonimia delle conchiglie mediterranee. Parte I. Monografia dei Chitonidi del Mediterraneo. *Giornale di Scienze Naturali ed Economiche di Palermo*, 14: 1–31.
- Pizzini M. & Oliverio M., 1993. Ritrovamento di *Callistochiton pachylasmae* (Monterosato, 1878 ex Seguenza G. ms) in Mediterraneo (Polyplacophora, Ischnochitonidae). *Notiziario C.I.S.Ma*, 14 (1992): 41–42.
- Ramos M., 2010. IBERFAUNA. The Iberian Fauna Databank.
- Sabelli B., 1971. Revisione del *Chiton pachylasmae* Monterosato. *Atti XL Convegno U.Z.I., Bollettino Zoologico*, 38: 561.