
ON THE OCCURRENCE OF THE BUOY BARNACLE *DOSIMA FASCICULARIS* ELLIS & SOLANDER, 1786 (CIRRIPIEDIA: LEPADIDAE) IN MALTESE WATERS WITH NEW RECORDS OF OTHER SPECIES OF THORACICA.

Constantine Mifsud¹

ABSTRACT

The occurrence of *Dosima fascicularis* Ellis & Solander 1786 in Maltese waters is recorded for the first time and additional records of other lepadid and scalpellid species are given.

INTRODUCTION

The various species of thoracican barnacles inhabiting the sea around our shores have been reviewed by Rizzo & Schembri (1997). The authors listed 19 species which were recorded with certainty from these Islands, three of which belong to the family Lepadidae Darwin, 1851. These include *Lepas anatifera* Linnaeus, 1767, *Lepas pectinata* Spengler, 1851, and *Paralepas minuta* (Philippi, 1836), a species found in deeper waters attached to the primary spines of cidariid sea urchins. *Lepas hillii* (Leach, 1818), (1988) and *Conchoderma virgatum* (Spengler, 1790), which had been recorded by Gramentz (1988) and *Scalpellum scalpellum* (Linnaeus, 1767), recorded by Rizzo & Schembri (1997) off Lampedusa, are recorded with certainty herein. *Dosima fascicularis* Ellis & Solander, 1786 is recorded for the first time for these Islands and probably also for the Mediterranean Sea.

Family Lepadidae

Lepas anatifera Linnaeus, 1767. (Fig. 1) This is the most abundant cirripede around our shores, found especially attached to our local fishermen's lampuki floats in great numbers, at times outweighing the float itself. This species is distinguished from its other congeneric species by possessing a tooth near the umbo of the right scutum.

Lepas pectinata Spengler, 1851. (Fig. 3) This is also extremely common around our shores. It is found attached to all types of floating objects such as pieces of wood, plastic containers and pumice stones. It was also found to be frequently attached to the shell of the pelagic snail *Janthina pallida* Thompson, 1840. The species is distinguished by the small size, the fleshy pinkish-brown colour and the heavily ribbed scuta and terga.

Lepas hillii (Leach, 1818). (Fig. 2) Rizzo & Schembri (1997) refer to a record of this species by Gramentz (1988) as an epibiont on the turtle *Caretta caretta*. A large number of specimens were found attached to an old, large motor vehicle tyre which was washed up at Mellieha Bay after an Easterly-Northeasterly storm. A few individuals were also found attached to fishing boat hulls at Gnejna Bay. The species differs from *L. anatifera* in having no teeth at the umbones of the scutum, and the carina is well separated from the scutum by a thick membrane.

Dosima fascicularis Ellis & Solander, 1786. (Fig. 6) During recent (May 2004) NW storms, a living specimen of *Dosima fascicularis* was washed ashore at Gnejna Bay. *Dosima fascicularis* can reach a length of 3.5cm. The capitulum consists of five valves, which are usually very brittle and translucent white. Unlike

¹ 4, Shepherds' Street, Rabat RBT 02, Malta kejdon@orbit.net.mt

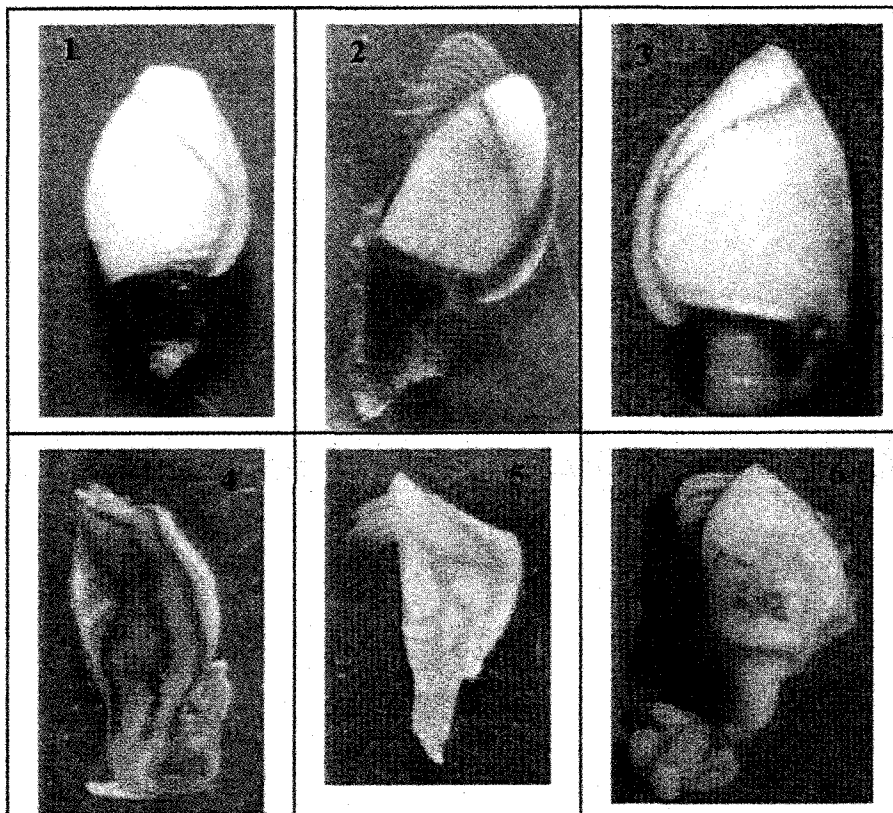


Fig. 1. *Lepas anatifera* Linnaeus, 1767
Fig. 2. *Lepas hillii* (Leach, 1818)
Fig. 3. *Lepas pectinata* Spengler, 1851
Fig. 4. *Conchoderma virgatum* (Spengler, 1790)
Fig. 5. *Scalpellum scalpellum* (Linnaeus, 1767)
Fig. 6. *Dosimia fascicularis* Ellis & Solander, 1786

other congeneric species, *D. fascicularis* does not usually attach itself to flotsam, but it secretes a white spongy float or buoy from the cement glands in its pedunculus (attachment stalk) and it is therefore completely pelagic. Although it may be found singly, in Atlantic waters it is usually found as a bunch, all attached to one common float. However, recently it has also been found attached to weathered globules of tar. Its distribution is cosmopolitan but it is mainly found in the Atlantic as far North as the English Channel.

The single live specimen found at Gnejna Bay has a capitulum length of 3cm. The valves of the tergum and the scutum were translucent, light bluish-purple in colour with their external surfaces delicately granular giving it a rather frosted appearance. The pedunculus is 1.5cm long and the white buoy perfectly spherical in shape and 15mm in diameter. Several juvenile specimens of *L. pectinata* were also attached to the capitulum of the specimen. The bluish-purple colour of the live specimen changed to orange yellow when it was later preserved in alcohol. Searches for similar specimens at the other adjacent beaches of Ghajn Tuffieha and Golden Sands and on the successive days of the storm, proved negative, although this could have been due to the large stinking masses of *Verella* and the acorn-shaped *Posidonia* fruits from the *Posidonia* meadow plants, which that year were beached in great quantities, in Malta as well throughout most of the Mediterranean.

D. fascicularis is absent from the Italian Marine fauna list (www.faunitalia.it/checklist) and no records for the Mediterranean could be found (G. Relini pers. comm.). Although it is listed in the European Register of

Marine Species (www.vliz.be/vmdcdata/erms), this is probably the first known record of *Dosima fascicularis* for the Mediterranean Sea.

Conchoderma virgatum (Spengler, 1790). (Fig. 4) A frequent and unmistakable species due to its particular fleshy capitulum and its colour pattern of purple vertical streaks. Some specimens were found attached to old ropes and fishing boat hulls at Gnejna Bay. Mamo (in Caruana, 1867) recorded this species as *Cineras coriacea* Poli, 1795, which is a synonym of this species. This species was previously recorded by Gramentz in 1998 as an epibiont on the turtle *Caretta caretta*.

Family Scalpellidae

Scalpellum scalpellum (Linnaeus, 1767). (Fig. 5) A large number of specimens were brought up attached to an old fishing line from a depth of 80 metres. The rope still had plastic ball floats attached to it at about 60 metres depth and had other species of marine fauna attached, including the bivalves *Pteria hirundo* (Linnaeus, 1758), *Pinctada radiata* (Leach, 1814) and *Neopycnodonte cochlear* (Poli, 1795) (Mifsud 2004).

ACKNOWLEDGEMENTS

I would like to thank Dr. G. Relini from the University of Genoa for help and important literature.

REFERENCES

- Gramentz D.** 1988 Prevalent epibiont sites on *Caretta caretta* in the Mediterranean Sea. *Naturalista Siciliano*, ser. 4, 12 (1-2): 33-46.
- Mamo, G.** (in Caruana A.A. 1867): *Enumeratio ordinata molluscorum Gualo-Melitensium of the late Mr. Giuseppe Mamo*, 78pp. Malta, British Press.
- Rizzo, M. & Schembri, P.J.** 1997: The Thoracican barnacles (Cirripedia: Thoracica) of the Maltese Islands and surrounding waters (Central Mediterranean). *The Central Mediterranean Naturalist*, 2(4):108-123

(Accepted November 2005)