

Anders Warén* & Ferdinando Carrozza**

IDAS GHISOTTII SP.N., A NEW MYTILID BIVALVE ASSOCIATED WITH
SUNKEN WOOD IN THE MEDITERRANEAN

KEY WORDS: Mollusca, Bivalvia, Mytilidae, *Idas* sp. n., Mediterranean Sea.

Abstract

Idas ghisottii is described from sunken drift wood in the Tuscan Sea. It is very similar to *I. japonica* (HABE, 1976) from Japan and New Zealand, but is smaller and more slender, and loses most of the crenulation of the anterior part of the hinge at a size of 6-9 mm.

Riassunto

Viene descritta *Idas ghisottii*, trovata su legno sommerso nel Mare Toscano. È specie molto simile a *I. japonica* (HABE, 1976) del Giappone e della Nuova Zelanda, rispetto alla quale è più piccola, più affusolata e ha una crenulazione meno evidente nella porzione anteriore della cerniera.

Introduction

Many species of various groups of molluscs from the deep sea live associated with a variety of organic remains (see e.g. DELL, 1987; MAR SHALL, 1988). The animals are usually quite specific in their choice of substrate (see WARÉN, 1990). Although it is obvious that many of the gastropods feed on the substrate, it is still not known how the bivalves use the substrate, since it is unlikely that they use it for attachment only.

In this paper we will describe a new species which six years ago was reported by CARROZZA (1984) from the Tuscan Sea as *Adipicola modiolaeformis* (STURANY, 1896), but, which at comparison with type material of STURANY's species, proved to be erroneously identified.

* Naturhistoriska Riksmuseet, Box 50007, S-10405 Stockholm, Sweden

** Villa Il Poggio, Via Chientina 5, I-56030 Soiana (Pi), Italia

*** Lavoro accettato il 15 gennaio 1990

Family Mytilidae

Genus *Idas* JEFFREYS, 1876

Idas gen. n. - JEFFREYS, 1876:428

Type species. *I. argenteus* JEFFREYS, 1876, by monotypy.

WARÉN (1990) presented a review of the North Atlantic species of *Idas* which live associated with organic remains and discussed the different species. He also maintained the use of *Idas* JEFFREYS instead of *Adipicola* DAUTZENBERG, 1927 and *Idasola* IREDALE, 1915, as a consequence of the opinion that *Idas* is not preoccupied.

The following species were recognised from the North Atlantic:

Idas argenteus JEFFREYS, 1876. A small species (up to 6 mm) with short smooth shell, known from off southern Iceland, off Portugal and from the northwestern Atlantic, off Massachusetts and off Virginia. It lives associated with sunken drift-wood.

I. simpsoni (MARSHALL, 1900), a larger species, up to 45 mm long with smooth shell (Figs. 1-2, 7-10), has the umbo at anterior 1/5-1/7, loses the crenulation of the posterior hinge margin at a size of 4-8 mm (Fig. 1-2, 9-10), and the dorsal margin forms a distinct angle with the ventral margin. It lives on old whale or dolphin skeletons or drifting pieces of blubber, occasionally on wood. It is known from southern Iceland, 100-200 m, and the North Sea, in a few hundred meters depth, to the Mediterranean (170 m) (QUERO, 1973; BARSOTTI & GIANNINI, 1974; CARROZZA, 1984).

I. dalmasi (DAUTZENBERG & FISCHER, 1897) is only known from shells from the Azores and off western Europe, reaches a size of at least 9 mm, has a distinctly curved ventral and almost parallel dorsal margin, and smooth hinge line already at a size of 6 mm (smallest specimen seen). It is figured by WARÉN (1990).

Myrina modiolaeformis STURANY, 1896, was described from two shells from deep water in the Mediterranean and was reported by CARROZZA (1984), from off Corsica.

Examination of CARROZZA's specimens showed them to differ considerably from STURANY's types and are here described as new. The types of *M. modiolaeformis* are figured by WARÉN (1990), who found it questionable if the species really belongs to *Idas*.

Idas ghisottii sp. n.
(Figs. 3-4, 5-6, 11-12)

TYPE MATERIAL. Holotype (Fig. 3-4) and three paratypes, SMNH 4139 and 4140; one paratype in MNHN; ten paratypes in coll. F. CARROZZA.

TYPE LOCALITY. Off western central Italy, Tuscan Sea, on submerged drift wood and free. All specimens contained badly decomposed soft parts.

MATERIAL EXAMINED. Carrozza has seen additional specimens from the same area. Several specimens from off Almeria, southern Spain, taken by fishing boats, Coll. G. Spada, Bologna.

DESCRIPTION. Shell slender, strongly convex, yellowish to olive brownish. The larval shell is rounded, smooth and reddish brown, consists of prodissoconch I and II and has a maximum diameter of 450 μ m. The hinge line is almost straight and has an anterior crenulated area, which or less more loses the teeth at a size of 6-9 mm (Figs. 11/12, 3/4) and a posterior crenulated margin, which keeps the crenulation distinct along its whole length also in our largest specimens. There is a very indistinct, blunt and rounded ridge from the posterior ventral corner towards the umbo. The sculpture consists of concentric, not very strong growth lines. The periostracal hairs are 0.4-0.6 mm long, attached with a flat triangular base, about 0.2 mm wide. The hairs are most conspicuous towards the posterior part of the shell. The periostracum is fairly solid, tough, smooth, shiny, and varies in colour from yellowish to more olive brownish.

DIMENSIONS. Length of holotype 11.2 mm, greatest height 3.8 mm, width 4.0 mm.

SOFT PARTS UNKNOWN

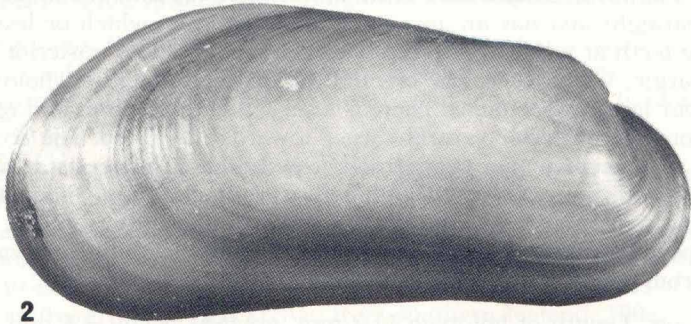
REMARKS. *I. ghisottii* differs from *I. simpsoni* (Figs. 1-2, 7-10) by being more inflated, by having a more distinctly concave ventral margin in adult specimens, and by maintaining the posterior crenulation up to adult size. Among other species of *Idas*, it closely resembles *I. japonica* (HABE, 1976), from the Pacific Ocean, but in that species the anterior crenulated area keeps the crenulation as adult (size 22 mm).

The specimens described above were taken on pieces of wood caught in the fishing gear of Tuscan fishing boats, which do not extend their trips outside that area. The Spanish specimens may be from localities more distant from the home harbour of the fishing boats.

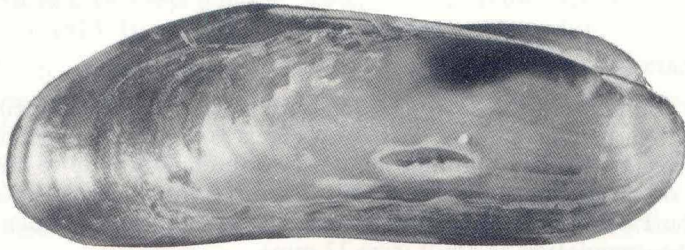
It is a pleasure for us to name this species after Dr. Fernando Ghisotti, who has been one of the driving forces behind the «Società Malacologica Italiana» for over a quarter of a century.



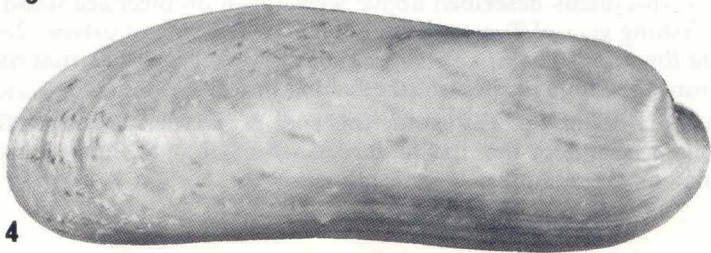
1



2



3



4

Figs. 1-4. 1-2. *Idas simpsoni*, Tuscan archipelago, found free, 17.2 mm. 3-4. *I. ghisotti*, holotype, 11.2 mm.



Figs. 5-12. 5-6, 11-12. *I. ghisottii*, paratypes, 2.1 and 6.8 mm. 7-10. *Idas simpsoni*, Tuscan archipelago, from wood and free, 1.9 and 6.4 mm.

REFERENCES

- CARROZZA, F. 1984. Microdoride di malacologia Mediterranea, Contributo sesto. - *Bollettino Malacologico* **20**: 219-226.
- CABIOCH, L. 1973. Sur la présence en Manche occidentale d'*Adula simpsoni* (MARSHALL) (Lamellibranche, Mytilidae. - *Travaux de station biologique de Roscoff (N.S.)* **20**: 31.
- BARSOZZI, G. & F. GIANNINI 1974. Primo ritrovamento di *Delectopecten vitreus* (GMELIN, 1789) e nuova segnalazione di *Adula simpsoni* (MARSHALL, 1900) nelle acque dell'Alto Tirreno. (Mollusca, Lamellibranchiata. - *La Conchiglia* **6** (64) 10-11, 15.
- DELL, R.K. 1987. Mollusca of the family Mytilidae (Bivalvia) associated with organic remains from deep water off New Zealand, with revisions of the genera *Adipicola* DAUTZENBERG, 1927 and *Idasola* IREDALE, 1915. - *National Museum of New Zealand Records* **3** (3): 17-36.
- HABE, T. 1976. Eight new bivalves from Japan. - *Venus* **35**: 37-45.
- MARSHALL, B.A. 1988. Skeneidae, Vitrinellidae and ORBITESTELLIDAE (Mollusca: Gastropoda) associated with biogenic substrata from bathyal depths off New Zealand and New South Wales. - *Journal of Natural History* **22**: 949-1004.
- MARSHALL, J.T. 1900. On a British species of *Myrina*, with a note on the genus *Idas*. - *Journal of Malacology* **7**: 167-170.
- QUERO, J.C. 1973. Présence d'*Adula simpsoni* Isur une crane de *Globicephala melaena* ramassé au chalut au Golfe de Gascogne. - *Annales de la Société des Sciences naturelles de la Charente-Maritime* **5**: 319-320.
- STURANY, R. 1896. Zoologische Ergebnisse VII. Mollusken I. (Prosobranchier und Opisthobranchier; Scaphopoden; Lamellibranchier; Gesammelt von S.M. Schiff *Pola* 1890-1894. - *Denkschriften der mathematisch-naturwissenschaftlichen Classe der Kaiserlichen Akademie der Wissenschaften* **63**: 1-36.
- WARÉN, A. 1990 (in press). New and little known mollusca from Iceland and adjacent areas. II. - *Sarsia*.