

**Opisthobranchia of the genus *Chelidonura* Adams, 1850
(Cephalaspidea) from the Isle of Malta**

Antonio S. PERRONE

Via Palermo 7, I-73014 Gallipoli, Italy

& Carmel SAMMUT

216/1 St. Joseph Flats, Rue d'Argens, Gzira GZR04, Malta

Two species of the opisthobranch genus *Chelidonura* are reported from the Isle of Malta: *C. fulvipunctata* Baba, 1938, and *C. italica* Sordi, 1980. This is the third published record of *C. fulvipunctata* for the Mediterranean. The synonymy with *C. mediterranea* Swennen, 1961, and *C. conformata* Burn, 1966, is discussed. *C. italica* is a locally common species. New observations on the anatomy of both species and comparison with other published records are presented. Key words: Gastropoda, Opisthobranchia, Cephalaspidea, Aglajidae, *Chelidonura*, Mediterranean, Malta.

The opisthobranch fauna of the Maltese islands has rarely been investigated. The most significant contributions are those by Bebbington (1970) and Perrone (1988, 1993). Since almost four years a new study of meso- and subtidal opisthobranchs all around the Maltese islands is taking place. During this study some little known forms of taxonomic and zoogeographical interest were discovered. Among the species, *Chelidonura fulvipunctata* Baba, 1938, is here recorded after the first Mediterranean description as *C. mediterranea* Swennen, 1961, from the shores of Turkey and a second published record from the Mediterranean coast of Israel (Mienis & Gat, 1987). *C. italica* Sordi, 1980, is locally common and 17 specimens were collected. A short comparison between the two aglajid species is here presented.

Chelidonura Adams, 1850

Chelidonura fulvipunctata Baba, 1938
(figs. 1a-b, 2a-b, 3-4)

- Chelidonura fulvipunctata* Baba, 1938: 3, fig. 1; Baba & Abe, 1959: 83; Marcus, 1961: 9; Allan, 1962: 218, fig. 51 (1); Abe, 1964: 20, 77, pl. 3 fig. 6; Carlson & Hoff, 1972: 20; Rudman, 1973: 213; Takaoka Biological Club, 1978: 5, 58; Gosliner, 1980: 334, fig. 10; Mienis & Gat, 1987: 709; Gosliner, 1987: 42, fig. 12; Gosliner, 1991: 315; Wells & Bryce, 1993: 37, fig. 29.
- Chelidonura mediterranea* Swennen, 1961: 44, figs. 1a-c, 2a-c.
- (?) *Chelidonura conformata* Burn, 1966: 100, figs. 11-12.

Material examined. - Malta, Ghar Lapsi, 1 specimen collected under sea urchin, 3 m depth, 19.VIII.1993, leg. Jimmy Bezzina, Perrone colln. no. 2228, colour transparencies.

Description. - The total length of the body is 28 mm. The body (figs. 1a-b) is elongate, separated dorsally, as usual, into an anterior cephalic shield and a posterior mantle shield. The cephalic shield is slightly longer than the mantle shield, excluding the long caudal lobe. The posterior end of the cephalic shield ends in a somewhat rounded tip. This structure overlaps the mantle shield and adheres to it while crawling. The head is roughly bilobed, but its shape changes during movement of the animal and may appear trilobed (cf. Baba, 1938). The two lateral lobes are auricular in shape. The foot is expanded laterally into two symmetrical parapodia which remain adhered to the sides and do not join at the dorsal surface. The left caudal lobe is quite elongate and ends in a tapering point. The right caudal lobe is very small and triangular in shape. A row of sensory cilia is present on the anterior edge of the head. The basic colour is velvet black with blue or purplish reflections. Numerous round or oval-elongate yellow-orange spots cover the whole body, leaving only a few areas, particularly the pointed end of the left caudal lobe and the anterior end of the foot, without spots. The yellow spots are also absent on the internal faces of the parapodia. The spots are different in diameter and an irregular pattern of large spots (average diameter 700 μm) alternates with minute dots. The white pigment forms a 'W' pattern on the head, roughly semilunular at the posterior end of the cephalic shield, and a very thin line at the parapodial edge and at the posterior end of the mantle shield.

The (internal) shell is fragile, measures 6 mm in length and is completely membranous. The central surface of the shell appears opaque due to light calcification, whereas the entire marginal area is transparent and completely membranous (fig. 2a). The most robust part is chestnut brown in colour and is restricted to the apex and a line, nearly 0.5 mm wide, which starts from the apex and extends for 3 mm on the dorsal surface of the shell. The flattened apical spire is covered by the anterior margin of the shell, clearly visible as a wing-like expansion. On the anterior margin of this expansion a white callus may be seen in the form of a series of folds shaped like a 'V', more evident on the ventral surface than on the dorsal surface. Three small areas of greater thickness, also chestnut brown in colour, may be seen on the centre and on the margin of the ventral surface respectively. Growth lines are visible all over the central area of the shell, whereas the surface appears smooth, due to lack of radial striae, and shiny.

The buccal mass (fig. 3) is a 5 mm strong muscular bulb and its anterior end is covered with a slender, dark mottled membrane surrounding the mouth. We cannot establish whether the pharynx is non-eversible. The oesophagus opens into a sack-like structure on the left side of the body (stomach?), then enters the digestive gland. The whitish hindgut runs along the right dorso-lateral side of the digestive gland, after a wide bend. The gonad consists of chestnut coloured follicles. In the anterior genital complex the penis (fig. 4) is about 0.5 mm long, simple ('acrembolic', Marcus, 1961) and arcuate. The fleshy keel-like barb, described by Burn (1966), is absent while the proximal part (prostate gland) is an opaque, white chestnut-speckled cylinder. Brown dots are visible along the distal penial sheath.

Discussion. - In the original description (Baba, 1938), the pale spots on the foot are not present, but we are unable to explain this fact which is faithfully reported and interpreted as the total absence of yellow spots on the foot by Marcus (1961) and later on by Abe (1964). Also, the white pigment on the head, as can be seen in the original drawing, is not in the form of a 'W', but more like a 'V' with the top flattened. The posterior edge of the cephalic shield is yellow in the holotype, but is white in our material, agreeing in this with the observations of Abe (1964). The specimen described by Swennen (1961) as *Chelidonura mediterranea* shows even more chromatic characters

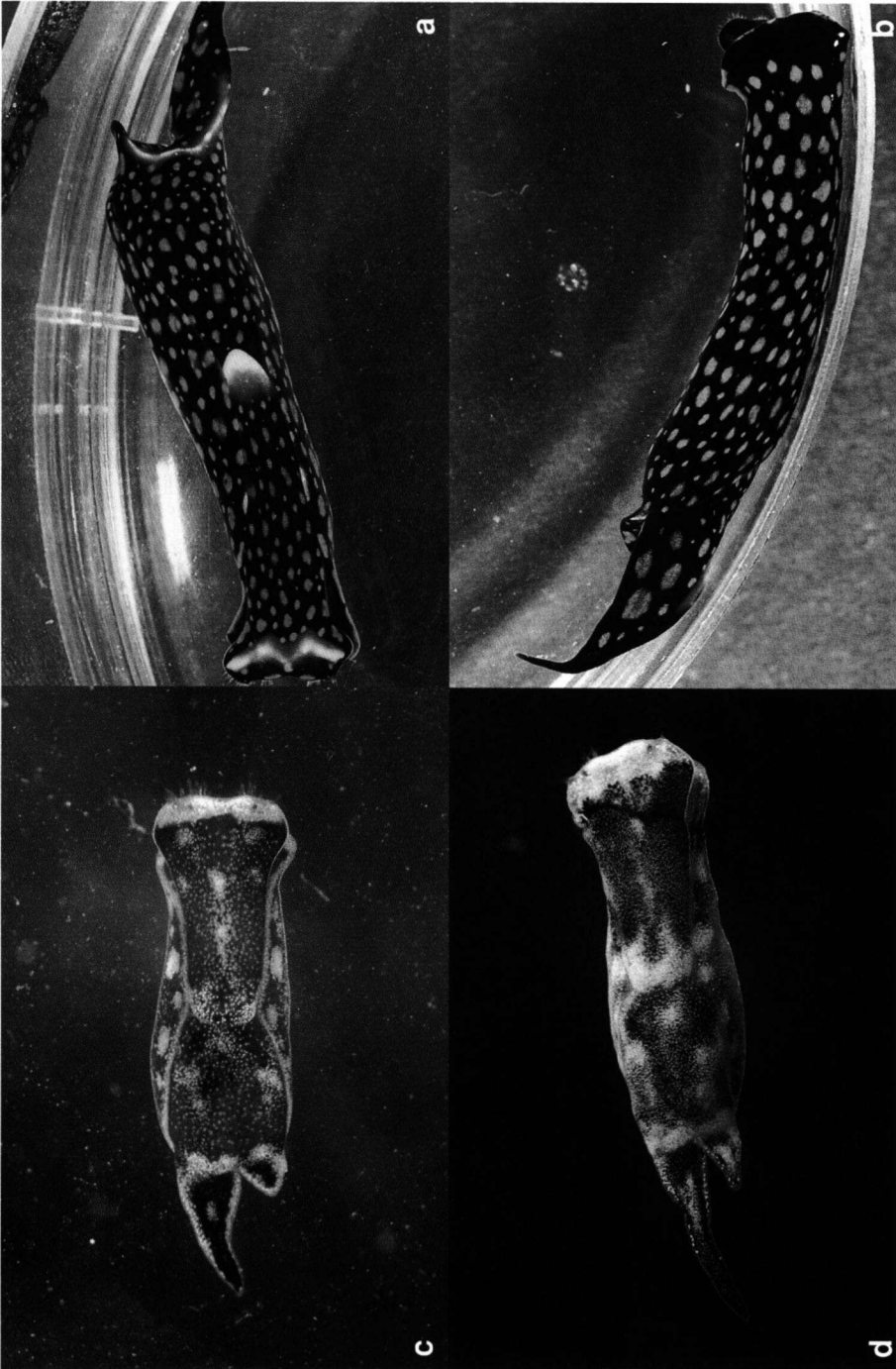


Fig. 1. *Chelidonura* species from Malta. a-b, *C. subtrifurcata* Baba (a, dorsal surface; b, ventral surface); c-d, *C. italica* Sordi (c, yellow-brown phase; d, whitish-brown phase). All figures highly enlarged.

SIZE

- 6-15 mm - Abe, 1964 (Japan)
- 10 mm - Mienis & Gat, 1987 (Mediterranean)
- 10-15 mm - Baba, 1938 (Japan)
- 18 mm - Swennen, 1961 (Mediterranean)
- 20 mm - Wells & Bryce, 1993 (Australia)
- 28 mm - present paper (Mediterranean)

COLOUR BODY**(VELVETY) BLACK**

- *Baba, 1938 (Japan)
- *Allan, 1962 (Australia)
- *Abe, 1964 (Japan)
- Rudman, 1973
- (Gosliner, 1987) (South Africa)
- *Mienis & Gat, 1987 (Mediterranean)
- *present paper (Mediterranean)

BROWN OR GREYISH BROWN

- *Swennen, 1961 (Mediterranean)
- *Allan, 1962 (Australia)
- *Burn, 1966 (Australia)
- (Wells & Bryce, 1993) (Australia)

COLOUR SPOTS**LIGHT BROWN**

- *Baba, 1938 (Japan)
- (Wells & Bryce, 1993) (Australia)

WHITE

- *Allan, 1962 (Australia)

GOLDEN

- *Allan, 1962 (Australia)
- (Gosliner, 1987)? (S. Africa)
- *present paper (Mediterranean)

ORANGE OR RED

- *Swennen, 1961 (Mediterranean)
- *Abe, 1964 (Japan)
- *Carlson & Hoff, 1972 (Guam, in Gosliner, 1980)
- Rudman, 1973
- *Gosliner, 1980 (Hawaii)
- *Mienis & Gat, 1987 (Mediterranean)

PATTERN FOOT**WITHOUT SPOTS ?**

- *Baba, 1938 (Japan)
- Marcus, 1961
- *Abe, 1964 (Japan)
- Rudman, 1973

WITH SPOTS

- *present paper (Mediterranean)

WHITE WITH BLACK NETWORK

- *Swennen, 1961 (Mediterr.)

FINE NETWORK

- *Burn, 1966 (Australia)

Table 1. Variation in size and colour (pattern) of *Chelidonura fulvipunctata* Baba over its entire range. Asterisks (*) refer to direct observations by the respective authors. The authors Gosliner (1987) and Wells & Bryce (1993) are shown between brackets because reference has been made to their figures and not their text.

divergent from typical *C. fulvipunctata*. In fact, the foot should be white with reticulate black lines; in addition, a longitudinal yellow central line, symmetrically flanked by round orange spots, extends to the cephalic shield. The presence of this longitudinal line was, however, confirmed by Gosliner (1980) for a specimen of *C. fulvipunctata* from Hawaii. On the other hand, the description of the colour pattern of the foot suggests that reference is made to a preserved animal, so that the colours are no longer the same as those of a living specimen. One should note that in other, closely related, forms of *Chelidonura* (e.g., *C. tsurugensis* Baba & Abe, 1964, or *C. inornata* Baba, 1949), the foot is ornamented with spots similar to those on the dorsum and not with a reticulate pattern of lines. The various authors are not in agreement as regards the colour of the spots on the body (table 1).

The (internal) shell is solid and measures 6 mm, which is three times as long as that observed by Swennen (1961) in his 18 mm long specimen (measured when alive). A diagram of the shell has also been published by Gosliner (1980: 332). This drawing shows small differences when compared to that of the Maltese material, especially as regards the absence of callus material along the upper margin and the absence of a distinct separation between the completely calcified central area and the membranous marginal area. The inclination of the spire also appears to be different, but apparent morphological differences are to be attributed to a different orientation of the shell during drawing or photography. One should also note that a shell with a membranous anterior margin has only been described for *C. sabina* Marcus & Marcus, 1970. We are of the opinion that this character is variable in each species and is of no taxonomic significance.

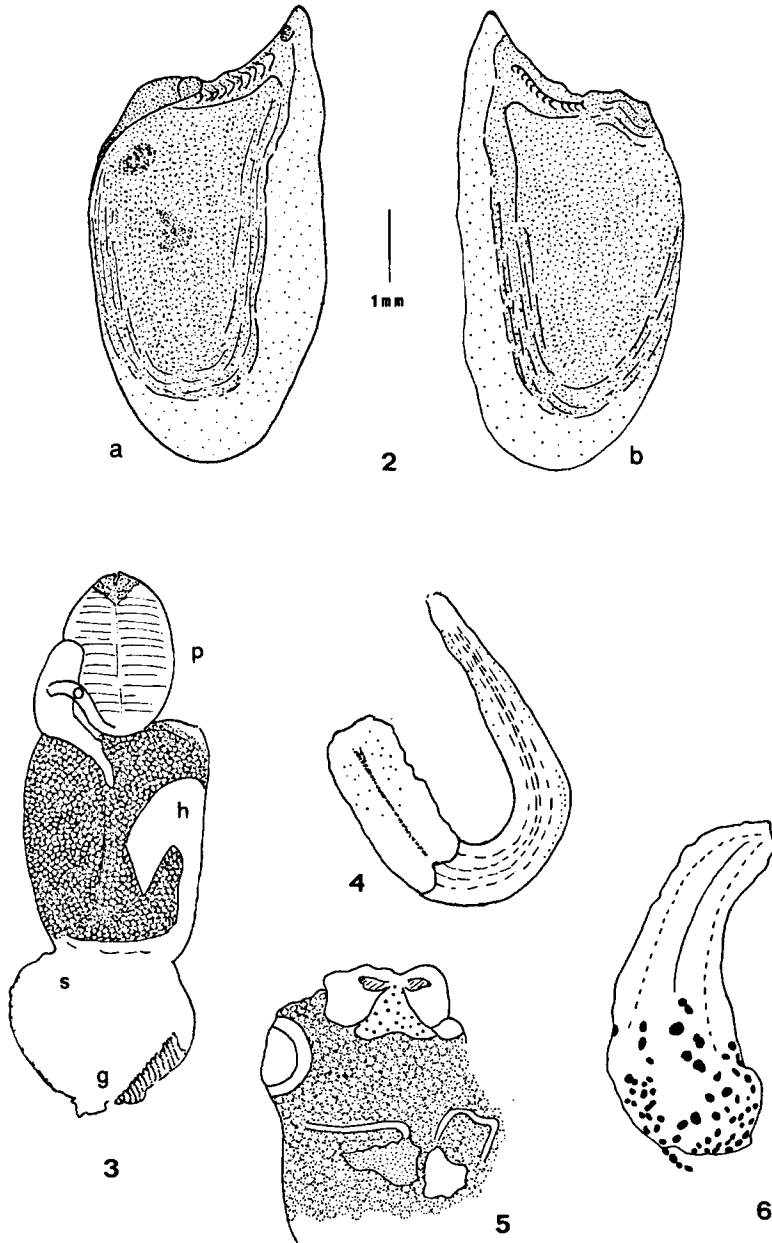
Gosliner (1980) has established the synonymy of *C. conformata* Burn, 1966, with *C. fulvipunctata*. *C. conformata* should be regarded as the chromatic phase most divergent from the typical *C. fulvipunctata* (table 1), having a brown body with a dark brown and fine reticulate pattern and a few small patches of dark red along the margin of the cephalic shield, parapodial margin and the base of the tail flagellum (Burn, 1966). However, some divergent details are evident in the penis structure.

The ecological data obtained to date is scarce, consisting of sporadic records, and does not allow for any useful conclusions. Allan (1962) reports the species as occurring periodically in considerable numbers "amongst fine weed growths on rocky sides of the large Angourie pool, a well-known collecting spot." The remaining recorded specimens have always been found under rocks which suggests that this species may be come active during the night in search of food.

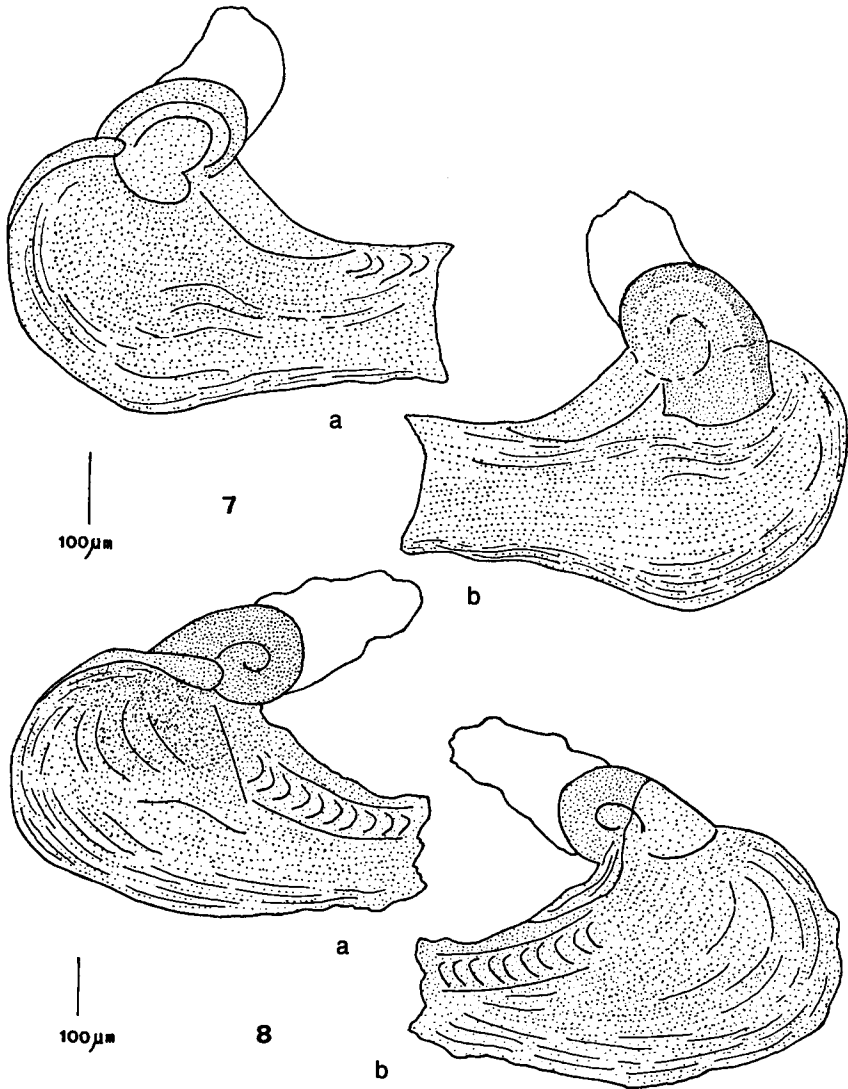
C. fulvipunctata appears to be very widely distributed: Mediterranean [Malta, this paper; Turkey (Swennen, 1961); Israel (Mienis & Gat, 1978)], South Africa (Gosliner, 1987), Australia [Western Australia (Wells & Bryce, 1993); ? Queensland (Burn, 1966 s.n. *C. conformata*); New South Wales (Allan, 1962)], Marianas Islands (Carlson & Hoff, 1972), Hawaiian Islands (Gosliner, 1987), Japan (Baba, 1938; Abe, 1964; Takaoka Biological Club, 1978).

Chelidonura italica Sordi, 1980
(figs. 1c-d, 5-6, 7a-b, 8a-b)

Chelidonura italica Sordi, 1980: 285, figs. 1-12 + 1 unnumbered fig.; Templado, Talavera & Murillo, 1983: 48; Ballesteros, Barrajon, Luque, Moreno, Talavera & Templado, 1986: 46; Marin & Ros, 1987: 140; Cervera, Templado, Garcia-Gomez, Ballesteros, Ortea, Garcia, Ros & Luque, 1988: 16; Martinez, Ballesteros, Avila, Dantart & Cimino, 1993: 22, figs. 6-7 (A-C), pl. 1 fig. 6.



Figs. 2-6. *Chelidonura* species from Malta. 2-4, *C. fulvipunctata* Baba. 2a-b, Shell (a, ventral surface; b, dorsal surface; scale 1 mm); 3, dorsal dissection, g = gill, h = hindgut, o = oesophagus, p = pharynx, s = (position of the) shell; 4, penis. 5-6, *C. italica* Sordi. 5, Dorsal dissection; 6, penis. All figures highly enlarged.



Figs. 7-8. Two shells of *Chelidonura italica* Sordi from Malta (lot # 4) (a, ventral surface; b, dorsal surface; scales 100 µm).

Chelidonura africana Pruvot-Fol, 1953: 31, pl. 3 fig. 37; Sordi, 1976: 143; Garcia, 1981: 38; Garcia & Garcia, 1984: 77, figs. 1-3; Yonow, 1990: 289, fig. 4.

Material examined. - Malta, (1) Cirkewwa, 1 specimen, 3 m depth, 10.IX.1992; (2) St. Julian's, 1, 1 m depth, 15.IX.1992; (3) Qalet Marku, 1, 1 m depth, 23.III.1993; (4) Bahar ic-Caghaq, 3, 1 m depth, 13.IV.1993; (5) Wied iz-Zurrieq, 1, 2 m depth, 9.V.1993; (6) Qajjenza, 1, 1 m depth, 8.VII.1993; (7) Qajjenza, 2, 1 m depth, 22.VIII.1993; (8) Qajjenza, 2, 1 m depth, 23.VIII.1993; (9) Qajjenza, 1, 1 m depth, 30.VIII.1993; (10) Qajjenza, 1, 1 m depth, 3.IX.1993; (11) Qajjenza, 1, 1 m depth, 12.IX.1993; (12) Qajjenza, 1, 1 m depth, 16.IX.1993; (13) Qalet Marku, 1, 1 m depth, 20.IX.1993. Perrone colln. nos. 1519, 1830, 1904-1906, 1997, 2241-2242, 2563 (egg mass), colour transparencies, microscope slides.

Description. - The extended length of the observed specimens ranges from 1 to 5 mm. The cephalic shield is bilobed anteriorly and rounded posteriorly. The parapodia are relatively little developed and leave the major part of the dorsum exposed. Two very distinct groups of sensory cilia are present on the bilobed anterior edge of the head. The length of the caudal lobes is different in all specimens. In fig. 1d the greatest difference in length between the lobes can be seen, but specimens with caudal lobes of exactly equal size have been observed (lot # 4), although one cannot exclude the fact that this may be due to a continuous reduction, with time, of the left caudal lobe. The anterior sensory appendages are divided into four groups, distinguishable into two lateral and two meso-lateral groups. In a 5 mm specimen (lot # 4) 40 sensory appendages were counted, divided into 20 units on each side of the cephalic lobes.

Five specimens of this species were dissected. The (internal) shell (fig. 7) was found in four specimens and only in the largest animal (3 mm long preserved, lot # 8) it was absent. The shell has a peculiar form and its shape is not exactly the same in all specimens. The shell is formed by a voluminous apical part, nautiloid or helicoid in appearance, consisting of two to three whorls and by a laminar part which is the wide body whorl. A flattened expansion of the irregular border, wing-like in shape, is attached to the helicoid part of the shell. This expansion is very thin and opaque. The shell, although fragile, is thick, well calcified and whitish. The entire surface is covered by concentric growth lines, but here are no radial striae. The right margin of the wide aperture of the shell extends so that its shape is elongate and irregularly subrectangular; the border of the extension appears to be notched. Along the anterior margin of the laminar part there is a more or less developed callus in the form of a series of 'V'-shaped folds, slightly more evident on the ventral surface. The helicoid part of the shell is fawn or reddish and semitransparent.

The colour of *C. italica* is complex and rather variable. The ground colour is brown to brownish-black, but always very dark. This basic colour is, however, interrupted by a multitude of more or less intensely yellow granules, variously aggregated in different individuals. A thin yellow line is present on the border of the parapodia and on the caudal lobe, and, in addition, a transversal yellow line on the head. The yellow pigment consists of granules, which may be white in various individuals. Other granules of iridescent blue aggregate to form spots which are roughly quadrangular. Such spots are arranged at regular intervals along the upper external border of the parapodia, but are also present on the caudal lobes and head.

The pharynx is much less developed than in *C. fulvipunctata* and is not evident in a dorsal dissection (fig. 5). The penis (fig. 6) is simple and tubular, semitransparent in its distal portion. The proximal part (prostate?) is sack-like and its surface is covered with comparatively large black granules.

Discussion. - Pruvot-Fol (1953) described an indeterminate number of specimens from the Atlantic coasts of Senegal and Morocco as *C. africana*. Her original description is very short and incomplete; in addition her three *C. africana* figures correspond to two or three different species of Aglajidae (cf. Garcia & Garcia, 1984). Sordi (1976) reported some *Chelidonura* specimens from the coast of Italy, referring them to *C. africana*. Sordi (1980) described a new species, *C. italica*, based on his Mediterranean specimens. In the same year, Gosliner (1980) regarded *C. africana* as a doubtful species and a possible synonym of *Navanax inermis* (Cooper, 1862), but Garcia (1981) and Garcia & Garcia (1984) identified their *Chelidonura* specimens from the Straits of Gibraltar with *C. africana*. Templado et al. (1983) suggested the synonymy between *C. italica* and *C. africana*. Recently, Ballesteros et al. (1986) and later on Cervera et al. (1988), accepting the established synonymy, suggested to consider *C. africana* a nomen dubium and to use the name *C. italica*. This was accepted by subsequent authors (Martinez et al., 1993) and is adopted in the present paper.

Yonow (1990) described *C. africana* from the Red Sea. However, these specimens are of a much larger size than the specimens previously recorded from the Mediterranean. Their basic colour is velvet black without any yellow pigmentation. The animals produce a yellow-brown mucus (perhaps released by the caudal lobes), that subsequently becomes yellow and is lethal to the fish in an aquarium. Such mucus secretions have never been observed in Mediterranean specimens. We are unable to compare the shell as one is figured in Yonow's paper.

C. italica is a gregarious species, appearing mostly in masses along the coast (Templado et al., 1983; personal observations). It is consistently found in algal communities: in formations of *Cymodocea* and *Caulerpa* in shallow water and in locations where accumulations of *Jania rubens* are present (Templado et al., 1983), on *Vaucheria* cf. *turetii* (fide Garcia Garcia, 1984), on Phaeophyceae (Ballesteros et al., 1986). The numerous specimens from Malta have also been observed in brown algae in shallow water.

C. italica appears to have a Mediterranean distribution, including the Straits of Gibraltar, while presence along the Atlantic coast needs confirmation. We think the specimens described by Yonow (1990) from the Red Sea may be referred to a different form. The range may be summarised as follows: Atlantic [?, Senegal and Morocco (Pruvot-Fol, 1953 s.n. *C. africana*)], Mediterranean [South East Spain (Templado et al., 1983; Ballesteros et al., 1986; Marin & Ros, 1987; Martinez et al., 1993); Italy (Sordi, 1976, 1980)], Straits of Gibraltar (Garcia, 1981; Garcia & Garcia, 1984, s.n. *C. africana*).

REFERENCES

- ABE, T., 1964. Opisthobranchia of Toyama Bay and adjacent waters: 1-96. Tokyo.
- ALLAN, J., 1962. Australian shells: i-xxi, 1-487. Melbourne.
- BABA, K., 1936. Opisthobranchia of the Ryukyu (Okinawa) Islands. — J. Dept. Agric. Kyushu Imp. Univ. 5 (1): 1-50.
- —, 1938. Opisthobranchia of Kii, middle Japan. — J. Dept. Agric. Kyushu Imp. Univ. 6 (1): 1-19.
- —, 1949. Opisthobranchia of Sagami Bay: 1-194. Tokyo.
- — & T. ABE, 1959. The genus *Chelidonura* and a new species, *C. tsurugensis* from Japan. — Publ. Seto Mar. Biol. Lab. 7: 83-84.
- BALLESTEROS, M., A. BARRAJON, A.A. LUQUE, D. MORENO, P. TALAVERA & J. TEMPLADO, 1986. Contribución al conocimiento de los gasterópodos marinos de Almería. — Iberus 6: 39-55.
- BEBBINGTON, A., 1970. Aplysiid species from Malta with notes on the Mediterranean Aplysiomorpha (Gastropoda, Opisthobranchia). — Pubbl. Staz. Zool. Napoli 38: 25-46.

- BURN, R., 1966. Some opisthobranchs from southern Queensland. — *J. Malac. Soc. Austr.* 9: 96-109.
- CARLSON, C., & P. HOFF, 1972. The genus *Chelidonura* from the arianas Islands. — *Veliger* 15: 20.
- CERVERA, J.L., J. TEMPLADO, J.C. GARCIA-GOMEZ, M. BALLESTEROS, J.A. ORTEA, F.J. GARCIA, J. ROS & A.A. LUQUE, 1988. Catalogo actualizado y comentado de los opistobranquios (Mollusca, Gastropoda) de la Peninsula Iberica, Baleares y Canarias, con algunas referencias a Ceuta y la Isla de Alboran. — *Iberus Suppl.* 1: 1-84.
- GARCIA, J.C., 1981. Moluscos opistobranquios del Estrecho de Gibraltar. — *Resumen III Congr. Nac. Malac. Cartagena*: 38.
- , & F.J. GARCIA, 1984. Sobre la presencia de *Chelidonura africana* Pruvot-Fol (Mollusca: Opisthobranchia) en el litoral iberico. — *Boll. Malac.* 20: 77-82.
- GOSLINER, T.M., 1980. Systematics and phylogeny of the Aglajidae (Opisthobranchia: Mollusca). — *Zool. J. Linn. Soc.* 68: 325-360.
- , 1987. Nudibranchs of Southern Africa: 1-136. Monterey.
- , 1991. Morphological parallelism in opisthobranch gastropods. — *Malacologia* 32: 313-327.
- MARIN, A., & J. ROS, 1987. Catalogo preliminar de las gasterópodos marinos del sudeste español. — *Iberus* 7: 137-145.
- MARCUS, E., 1961. Opisthobranch mollusks from California. — *Veliger* 3 Suppl.: 1-85.
- MARTÍNEZ, E., M. BALLESTEROS, C. AVILA, L. DANTART & G. CIMINO, 1993. La familia Aglajidae (Opisthobranchia: Cephalaspidea) en la Peninsula Iberica. — *Iberus* 11: 15-29.
- MIENIS, H.K., & G. GAT, 1987. A record of the Indo-Pacific species *Chelidonura fulvipunctata* from the Mediterranean coast of Israel (Opisthobranchia, Aglajidae). — *Levantina* 67: 709-711.
- PERRONE, A.S., 1988. Opistobranchi (Aplysiomorpha, Pleurobranchomorpha, Sacoglossa, Nudibranchia) dell'Isola di Malta. — *Atti Soc. Ital. Sci. Natur.* 129 (1): 85-88.
- , 1993. Nudibranchi del genere *Chromodoris* Alder & Hancock, 1855 dall'Isola di Malta (Opisthobranchia: Nudibranchia). — *Boll. Malac.* 29: 65-80.
- PRUVOT-FOL, A., 1953. Études de quelques opisthobranches de la côte atlantique du Maroc et du Sénégal. — *Trav. Inst. Sci. Chér.* 5: 1-105.
- RUDMAN, W.B., 1973. On some species of *Chelidonura* (Opisthobranchia: Aglajidae) from Zanzibar and Fiji. — *Zool. J. Linn. Soc. London* 52: 201-215.
- SORDI, M., 1976. Catture occasionali e reperti di specie animali finora non segnalate nell'Alto Tirreno. — *Atti Soc. Tosc. Sci. Nat. Mem. (B)* 83: 138-145.
- , 1980. Una nuova specie di Aglajidae (Gastropoda: Opisthobranchia) vivente nel mare Tirreno: *Chelidonura italica* Sordi. — *Atti Soc. Tosc. Sci. Nat. Mem. (B)* 87: 285-297.
- SWENNEN, C., 1961. On a collection of Opisthobranchia from Turkey. — *Zool. Meded. Leiden* 38: 41-75.
- TAKAOKA BIOLOGICAL CLUB, 1978. Distributional list of the Opisthobranchia in the central Japan Sea province: 1-146. Takaoka.
- TEMPLADO, J., P. TALAVERA & L. MURILLO, 1983. Adiciones a la fauna de opistobranquios del Cabo de Palos (Murcia). I. — *Iberus* 3: 47-50.
- WELLS, F., & C.W. BRYCE, 1993. Sea slugs of Western Australia: 1-184. Perth.
- YONOW, N., 1990. Red Sea Opisthobranchia. 3: The orders Sacoglossa, Cephalaspidea, and Nudibranchia: Doridacea (Mollusca: Opisthobranchia). — *Fauna Saudi Arabia* 11: 286-299.