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RARE RECORDS OF *EUCHIROGRAPSUS LIGURICUS*  
(*DECAPODA BRACHYURA PLAGUSIIDAE*)  
IN THE SOUTHERN TYRRHENIAN SEA

SUMMARY

Four adult specimens of a rarely recorded crab, *Euchirograpsus liguricus*, were collected off Palermo, Sicily, southern Tyrrhenian Sea, over the past 23 years. Observations on its morphology and collection sites are given.

*Key words:* *Euchirograpsus*, Plagusiidae, Mediterranean Sea

RIASSUNTO

*Segnalazioni del raro Euchirograpsus liguricus (Decapoda Brachyura Plagusiidae) nel mar Tirreno meridionale.* Quattro esemplari adulti del raro granchio *Euchirograpsus liguricus* sono stati raccolti al largo di Palermo (Tirreno meridionale). Vengono fornite considerazioni sulla morfologia degli esemplari e sulle località di raccolta.

*Parole chiave:* *Euchirograpsus*, Plagusiidae, mar Mediterraneo

The plagusiid crab *Euchirograpsus liguricus* H. Milne Edwards, 1853 has been recorded in the eastern Atlantic Ocean, ranging from Portugal to Namibia, Madeira and the Azores, and the western Mediterranean Sea (D'UDEKEM D'ACQZ, 1999). However, since the type specimen was collected off Nice (MILNE EDWARDS, 1853: 175), only a handful of specimens were recorded in the Mediterranean Sea: from Alboran Sea (ABELLO *et al.*, 2002), Malaga (GARCIA RASO, 1984), Cabo Norfeo, Girona (ZARIQUIEY ALVAREZ, 1948), Mallorca (GARCIA SOCIAS, 1985; GARCIA, 2007), Nice (TÜRKAY, 1975), Naples (MONCHARMONT, 1979), Strait of Messina (COSTA, 1871; GIACOBBE & SPANÒ, 2006) (Tab. 1).

Table 1.  
*Records of Euchirograpsus liguricus H. Milne Edwards 1853  
 in the Mediterranean Sea (—: no data reported).*

Locality	Number and sex	Size (CL x CW) mm	Date of collection	Depth	Ecological remarks	References
Villefranche (Nice, France)	1 male	30 x 35 mm	1846	—	—	MILNE EDWARDS (1853) <b>TYPE</b>
Strait of Messina (Italy)	1 male	28 x 29 mm	<1871	—	—	COSTA (1871)
Nice (France)	1 male	30.56 x 35.07 mm	<1898	—	—	P. Clark, NHM, pers. comm., in TÜRKAY (1975)
Naples (Italy)	1 female	21.49 x 25.07 mm	27 February 1894	—	—	A. Travaglini, pers. comm., in MONCHARMONT (1979)
Gulf of Naples (Italy)	1 male	24.0 x 26.2 mm	30 November 1896	—	—	C.H.J.M. Fransen & K. van Dorp, pers. comm., in TÜRKAY (1975)
Secca di Chiaia (Naples, Italy)	1 male	25.88 x 29.65 mm	28 October 1924	50 m	Coralligenous bottom	A. Travaglini, pers. comm., in MONCHARMONT (1979)
As above	1 male	25.45 x 27.23 mm	28 October 1924	50 m	Coralligenous bottom	A. Travaglini, pers. comm., in MONCHARMONT (1979)
Cabo Norfeo, between Rosas and Cadaques (Girona province, Spain)	1 male	32 x 35 mm	August 1947	54 m	Gravel bottom ( <i>grapisar</i> )	ZARIQUIEY ALVAREZ (1948, 1968)
Off Malaga (Spain)	2 specimens	—	1978-1981	—	—	GARCIA RASO (1984)
Puerto del Soller (Mallorca, Balears, Spain)	1 male	23 x 25 mm	8 October 1983	25-35 m	Rocky bottom	GARCIA SOCIAS (1985)

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Locality	Number and sex	Size (CL x CW)	Date of collection	Depth	Ecological remarks	References
As above	2 specimens	—	11 July 1985 / 16 August 1985	30 m	—	GARCIA (2007)
Isola delle Femmine (Palermo, Italy)	1 male	27.5 x 29.2 mm	July 1990	75 m	—	Present paper
As above	1 female	25.7 x 27.5 mm	July 1990	75 m	—	Present paper
Between Nerja and Cape Gata (Eastern Alboran Sea)	1 specimen	—	1994-1999	620 m	—	ABELLO <i>et al.</i> (2002)
Gulf of Carini (Palermo, Italy)	1 male	22.2 x 23.7 mm	18 April 1993	140 m	Rocky and detritic bottom, with coarse sediments	Present paper
Off Capo Gallo (Palermo, Italy)	1 male	25 x 27.8 mm	26 June 1994	125 m	Coarse sediments and maërl bed	Present paper
Strait of Messina (Italy)	1 male	32 x 35 mm	August 2000	65 m	Rocky bottom covered by calcareous algae and “kelp” seaweeds	

Over the past two decades, four additional specimens have been collected off Palermo, Sicily. On July 1990, male (Carapace length (CL) 27.5 mm) and female (CL 25.7 mm) specimens (Figs. 1A, 1B) were collected near Isola delle Femmine, at depth of 75 m (preserved dry, deposited in the private collection of Michele Reina, Palermo). On 18<sup>th</sup> April 1993, a male specimen (CL 22.2 mm) (Fig. 1C) was collected in the Gulf of Carini, near Palermo, at depth of about 140 m (preserved dry, deposited in the Casamuseo “Matteo Sercia” in Favignana Island, collection number CCGS 0001). On 26<sup>th</sup> June 1994 a male specimen (CL 25 mm) (Fig. 1D) was collected by gill nets used in lobster fishery, off Capo Gallo, at depth of 125 m (deposited in the Natural History Museum of Florence University, collection number MZUF 3983).

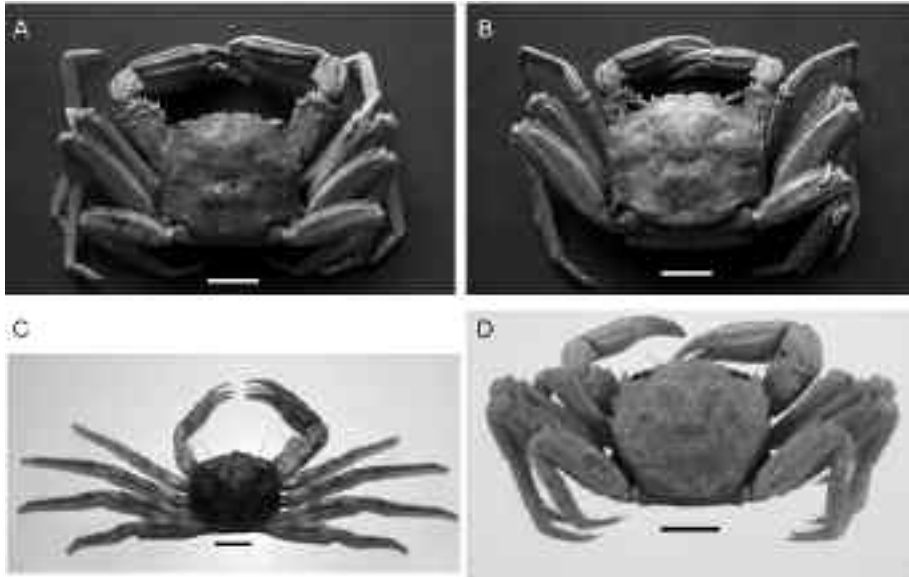


Fig. 1 — *Euchoirograpsus liguricus* A, male (private collection M. Reina), Isola delle Femmine; B, female (private collection M. Reina), Isola delle Femmine; C, male (CCGS 0001), Gulf of Carini; D, male (MZUF 3983), Capo Gallo (bar=10 mm). A, B and C, photos by G. Sercia; D, photo by S. Bambi.

*Morphology.* *Euchoirograpsus liguricus* is characterized by an almost square and depressed carapace, with four pointed teeth laterally, the first three robust, the last one smaller than the others; the front is bilobed and finely denticulate; the surface of the carapace densely granulated. The chelipeds are slightly unequal in size, the pereiopods are slender and their dactyl has peculiar spines. Extensive morphological descriptions of *E. liguricus* are given by MILNE EDWARDS (1853), COSTA (1871), and TÜRKAY (1975).

*Colour.* The specimen deposited in Florence Museum (MZUF 3983) is reddish and that preserved in Favignana (CCGS 0001) has clear red transversal stripes on the pereiopods. According to MILNE EDWARDS (1853) the crab is yellow-reddish with some rust spots on the carapace and transversal stripes of the same colour on the ambulatory legs. The colour of freshly collected crabs is also reported by GARCIA SOCIAS (1985) and GIACOBBE & SPANÒ (2006).

*Habitat.* The area between Capo Gallo and Terrasini, at depths of 125-140 m, is characterised by a shelf-edge detritic bottom, with coarse sediments and dispersed rocky bottom with maërl beds (C. Pipitone, pers. comm.; CATALANO *et al.*, 2007).

With the exception of the specimen reported by ABELLO *et al.* (2002), found at the depth of 620 m, the recorded bathymetric range of the species is between 25 and 140 m in the Mediterranean Sea, and 10 and 359 m in the Atlantic Ocean (MANNING & HOLTHUIS, 1981). *Euchirograpsus liguricus* crabs were collected from rocky bottoms, as well from areas characterized by coarse sediments, coralligenous or seaweed beds, and their carapace width ranged from 23.7 to 35 mm.

We confirm the presence of this rare crab off north west Sicily. Since 2002, the region between Capo Gallo and Isola delle Femmine is a protected natural area, where, it is to be hoped, it will survive.

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