FIRST RECORD OF *PORTUNUS PELAGICUS* (LINNAEUS, 1758) (DECAPODA, BRACHYURA, PORTUNIDAE) IN THE NORTHERN TYRRHENIAN SEA

BY

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INTRODUCTION

The opening of the sea level Suez Canal in 1869 and the increase in commercial shipping routes have led to the colonization of the Mediterranean Sea by Indo-Pacific species. These first established populations along the Levantine coasts, and then spread into the central Mediterranean, at least in part by shipping transport of larvae, juveniles, or adult specimens. One of those species is *Portunus pelagicus* (Linnaeus, 1758), a crab belonging to the Portunidae, and until now found in Italy only on the eastern Sicilian coasts.

MATERIAL, RESULTS, AND DISCUSSION

*Portunus pelagicus* occurs in the Indo-Pacific region from the Red Sea to Tahiti. It can easily be distinguished from *Callinectes* spp., the other large portunid crabs introduced into the Mediterranean, by the prominent inner spine on the cheliped carpus and, in males, by the triangular abdomen (Galil et al., 2002). It was first recorded from the Mediterranean Sea off Egypt in 1898 as *Neptunus pelagicus* (see: Fox, 1924), and in the following years it was also recorded from Palestine (Fox, 1924), southern Turkey (Gruvel, 1928), the Lebanon (Steinitz, 1929), Syria (Gruvel, 1930), Italy (Ghisotti, 1966), Cyprus (Demetropoulos & Neocleous, 1969), and, finally, Greece (Corsini Foka et al., 2004). There four adult specimens were collected in different marine areas of Rhodes Island from 1991 to 2000.

In the Levantine basin, this species seems to be very abundant and of commercial interest since the 1920s, while in Italy *P. pelagicus* is infrequent, and its known geographical range was, until now, restricted to eastern Sicily. It was first recorded

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from that area by Ghisotti (1966), who bought some specimens from Sicily in a fish shop in Milan, but identified them erroneously as *Callinectes sapidus* Rathbun, 1896. Torchio (1967) likewise misidentified material of the species, which he reported from Sicily, and more precisely from Augusta Bay and Magnisi peninsula, as *C. sapidus*. Only one year later the same author, Torchio (1968), corrected the misidentification and confirmed the presence of a large population of *P. pelagicus* in Augusta Bay (Siracusa, Sicily). Ariani & Serra (1969) studied this population and its different temporal and spatial distribution in the area. In Porto Xifonio, in fact, only a few specimens of *P. pelagicus* were found, while in Porto Megarese the species was abundant. After a strong decline in the early 1980s, at the moment this brachyuran crab seems to be recolonizing the Augusta Bay, and sells in huge quantities at the fish markets. Five specimens, including an ovigerous female, have been found and analysed between 2004 and 2005 by Catalano et al. (2006, in press). Cavaliere & Berdar (1975), finally, reported two specimens of *P. pelagicus* (identified as *C. sapidus*, too) collected in the Straits of Messina in the spring of 1970 and autumn of 1972.

In the spring of 2004, a female of *Portunus pelagicus* was caught with a trammel net near Diga della Vegliaia, Livorno harbour, at a depth of about 15 m, on a muddy bottom with patches of *Caulerpa prolifera* (Forskål) and *Posidonia oceanica* (Linné). Other crabs caught in the same place on that day were *Goneplax rhomboides* (Linnaeus, 1758), *Medorippe lanata* (Linnaeus, 1767), and *Dromia personata* (Linnaeus, 1758).

The specimen (fig. 1), at present preserved in the personal collection of the author, has a carapace length of 65 mm and a carapace width, between the tips of 9th lateral spines, of 137 mm. Its right cheliped is clearly regenerating and much smaller than the left cheliped, that has a total length of 165 mm (propodus 75 mm, carpus 25 mm, merus 76 mm).

This record, the first for the Tyrrhenian Sea, extends the known distribution of *Portunus pelagicus* in the Italian seas. As reported by Ariani & Serra (1969), the introduction of this species along the eastern Sicilian coasts was likely due to shipping transport of larvae, juveniles, or adult specimens from the eastern Mediterranean. It is reasonable to assume the same way of introduction also for the present material collected near the Livorno harbour, where recently three allochthonous species of Mollusca were also recorded for the first time (Campani et al., 2004; Crocetta, 2005).

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