

## OCCURRENCE OF *OCYTHOE TUBERCULATA* (CEPHALOPODA: OCYTHOIDAE) IN THE STRAIT OF MESSINA (CENTRAL MEDITERRANEAN)

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### Abstract

The occurrence of two females of *Ocythoe tuberculata* Rafinesque, 1814, during June 2006 and April 2009, in the Strait of Messina (Central Mediterranean) is reported. *O. tuberculata* is a pelagic octopod species rarely reported in the Mediterranean Sea.

*Keywords: Cephalopods, Strait Of Messina*

*O. tuberculata* is known to be cosmopolitan in tropical and temperate seas ([1], [2]). It was reported along the Mediterranean ([3],[4]), in the Greek waters [5], in the Catalan coasts [6], and in the Sicilian Channel [7]. It has been reported off the Azores and Canary archipelagos and in Peruvian waters [8], in the west of Portugal and north-west of Spain [9]. Few informations are available about the biology and behaviour of this species. It shows a strong sexual dimorphism with males that are usually smaller than 3 cm in mantle length while females are larger with a maximum mantle length reported of 3,5 cm [10]. Females of *Ocythoe* are one of the few known cephalopods with a true swimbladder and the only known cephalopods that are ovoviviparous.

An interesting feature of the species is the mode of locomotion that occurs through the enormous funnel, considered one of the greatest of cephalopods, and the powerful cloak which provide great strength in the expulsion of water from the palpeal cavity. The two specimens were caught at few metres by the falcate zone of S. Raineri (Strait of Messina): one of the two specimens was caught inside a group of Salps. The main morphological data of the two specimens are recorded and reported. The female caught in June 2006 was sexually mature, with a total length of 410 mm, total weight of 320 g, mantle length of 225 mm, mantle perimeter of 240 mm, mantle wide of 100 mm, eye diameter of 18 mm and funnel length of 44 mm. The female caught in April 2009 was a juvenile with a weight of 82,4 g, total length of 231 mm, mantle length of 84 mm, mantle perimeter of 148 mm, mantle wide of 55 mm, eye diameter of 17mm and funnel length of 35 mm. The presence of *O. tuberculata* in the Straits of Messina is probably in relation to the hydrodynamics phenomena of the Straits. The main characteristics of the Messina Straits are the strongest tidal currents reaching 300 cm/s or more, with the addition of other effects (wind for example). Strong turbulence is present mainly nearby the northern mouth, but in the whole Straits the currents are turbulent, with large internal waves. In fact other pelagic cephalopods as *Thysanoteuthys rhombus* were caught in the same area.



Fig. 1. Female of *O. tuberculata* caught in April 2009

Tab. 1. Morphological data of two females of *O. tuberculata*

	Female 1	Female 2
Date of capture	12/06/2006	29/04/2009
Weight (g)	320	82.4
Total length (mm)	410	231
Mantle length (mm)	225	84
Head length (mm)	35	20
Mantle perimeter (mm)	240	148
Mantle wide (mm)	100	55
Eye diameter (mm)	18	17
Funnel length (mm)	44	35

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