VERRUCAE ON SEA-FANS: UNEXPECTED ABUNDANCE OF THE BARNACLE CONOPEA CALCEOLA (ELLIS) ON THE GORGONIAN EUNICELLA SINGULARIS (ESPER) IN THE MEDITERRANEAN SEA

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Introduction
The tropical barnacle Conopea calceola (Ellis), living on gorgonians, has a wide distribution extending from the eastern Atlantic coast to the Indian Ocean, and further to the seas bordering S.E. Asia (1). It has been reported present, yet rare in Southern Italy (2,3).

Methods
A biodiversity survey was carried out in May 2012 at Favignana Island (Marine Protected Area of Egadi Islands, Sicily Channel, Italy). In 16 localities, rocky bottom communities were video-surveyed along transects spanning on the whole a 0 to 60 m depth range.

Results
C. calceola was found in 11 out of 16 sites (Fig. 1). A total of 570 E. singularis colonies were surveyed, of which 24.6% were seen to host C. calceola (Tab. 1). The majority of E. singularis colonies living on bottoms between 15 and 30 m were characterized by tens of ‘verrucae’ barnacle housings (Fig. 2).

Discussion
Present occurrence and abundance of this barnacle may be compared with those of other warm-water species such as Solidobalanus fallax (Broch), which is found inhabiting the British sea-fan Eunicella verrucosa (4). As for S. fallax, C. calceola ubiquitous presence observed in the last few years is probably due to increasing seawater temperatures, favoring species widespread and making it more detectable. In light of serious threats affecting the Mediterranean white gorgonian E. singularis such as the extensive mortalities that occurred in the past decade (5), the increase in C. calceola abundance could signify a further problem for E. singularis. This ‘co-habitation’ may represent a strategy for C. calceola survival in the changing Mediterranean Sea.

References