

## Two new records for the Chafarinas Islands: the black coral *Antipathella subpinnata* (Anthozoa) and the invasive crab *Percnon gibbesi* (Crustacea)

### Dos nuevas citas para las Islas Chafarinas: el coral negro *Antipathella subpinnata* (Anthozoa) y el cangrejo invasor *Percnon gibbesi* (Crustacea)

L. SÁNCHEZ-TOCINO<sup>1</sup>, J. M. TIERNO DE FIGUEROA<sup>1</sup> & A. DE LA LINDE RUBIO<sup>2</sup>

1. Departamento de Zoología. Facultad de Ciencias. Universidad de Granada. 18071, Granada, España. E-mail: lstocino@ugr.es, jmtdef@ugr.es

2. C./ Santa Ana, n.º 2, 1.º D, Granada, España. E-mail: antdelalinde@gmail.com

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As a result of a sampling campaign developed during the summer of 2014 in the coast of the Chafarinas Islands (Western Mediterranean Sea), two animal species were detected constituting interesting new records for this area.

The black coral *Antipathella subpinnata* (Ellis & Solander, 1786) (Fig. 1) was found in La Laja (N 35° 11' 06.96'', W 2° 26' 13.17'', North-East of Congreso Island, 32 m depth at the entrance of a cave). The colony reached approximately 1 m high.

*Antipathella subpinnata* is an Atlantic-Mediterranean species, a common component of the hard substrates of the lower fringe of the circalittoral assemblage, inhabiting between 50 and 500 m deep (Bo *et al.*, 2008; de Matos *et al.*, 2014). It is outstanding that in the Chafarinas Islands *A. subpinnata* has been detected at a very shallow depth comparing with what it is usual in all the distribution area of this species. In fact, according to Bo *et al.* (2009), this species has never been collected at depths shallower than 50 m. The presence of *A. subpinnata* in the place where it was found in the Chafarinas was favored due to the particular environmental characteristics of the site (low-light, hard substrates, and enhanced suspended sediment supply) coinciding

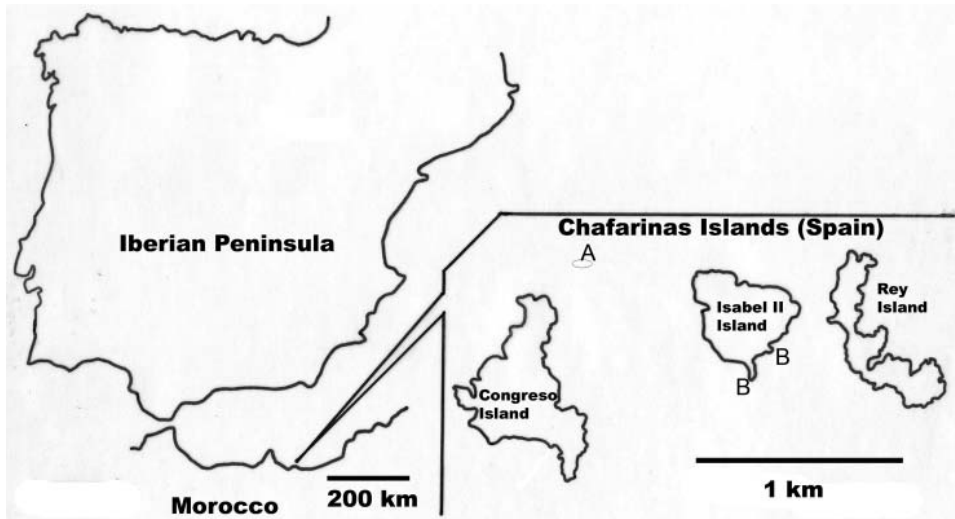


Fig. 1.—Map of the Chafarinas Islands. A: site where *Antipathella subpinnata* was detected. B: Sites where *Percnon gibbesi* were detected.

Fig. 1.—Mapa de las Islas Chafarinas. A: lugar donde *Antipathella subpinnata* fue detectada. B: lugares donde *Percnon gibbesi* fueron detectados.

with those reported by Wagner (2011) as important for the development of colonies of antipatharians all around the world.

From a conservation point of view, this taxon has not yet been assessed for the IUCN Red List (The IUCN Red List of Threatened Species, 2014). Nevertheless, this species deserves protection in the Mediterranean Sea where it is a notable component of the circalittoral environment creating an important three-dimensional habitat (Bo *et al.*, 2009).

The particular characteristics of the Chafarinas Island favour the presence at low depth of other Anthozoa typical from deeper waters such as *Ellisella paraplexuroides* Stiasny, 1936 and *Savalia savalia* (Bertoloni, 1819).

The crab *Percnon gibbesi* (H. Milne Edwards, 1853) (Fig. 2) was detected in Muelle Titan (N 35° 10' 45.89'', W 2° 25' 45.37''), and Muelle Chico (N 35° 10' 50.05'', W 2° 25' 40.36'') (Southern Isabel II Island, between 0 and 2 m deep). This species was particularly abundant in Muelle Chico (more than 10 individuals could be observed in a single transect of 20 meters).

This subtropical crab is considered as an invasive species in the Mediterranean Sea, first recorded in this area in 1999 in Linosa Island (Sicily Strait) (Relini *et al.*, 2000), and, shortly after, in the Balearic Islands (García & Reviriego, 2000). Since then, its population in the Mediterranean Sea has expanded rapidly and many new records have been published all

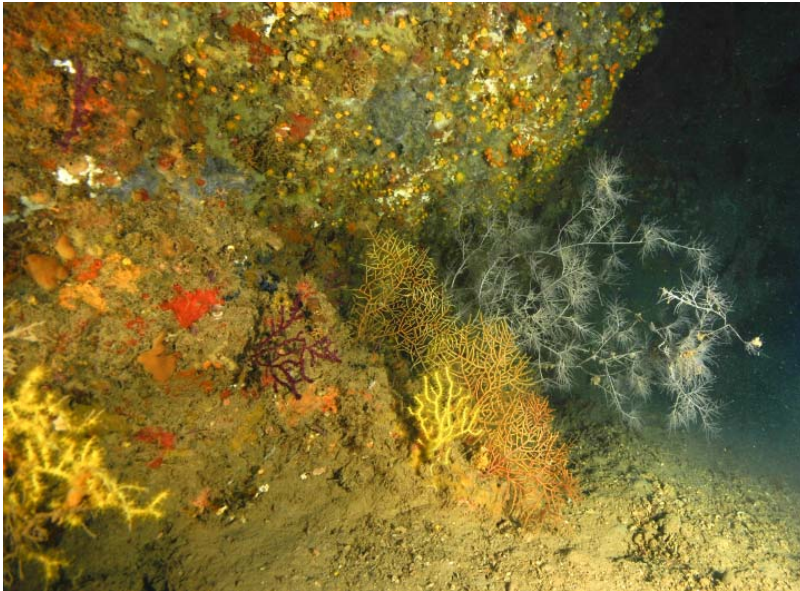


Fig. 2.—*Antipathella subpinnata* (on the right) in its natural environment in the Chafarinas Islands.

Fig. 2.—*Antipathella subpinnata* (a la derecha) en su ambiente natural en las Islas Chafarinas.



Fig. 3.—*Percnon gibbesi* in its natural environment in the Chafarinas Islands.

Fig. 3.—*Percnon gibbesi* en su ambiente natural en las Islas Chafarinas.

along the Mediterranean coast, from Spain to Lebanon and from northern Italy to Lybia and Egypt (Katsanevakis *et al.*, 2011). Despite it is accepted that *P. gibbesi* entered through the Strait of Gibraltar into the Mediterranean Sea (Relini *et al.*, 2000; Deudero *et al.*, 2005), this species has not yet been observed in the Mediterranean coast of Morocco (Katsanevakis *et al.*, 2011).

In the Mediterranean Sea, *P. gibbesi* seems to prefer the shallow infralittoral rocky shore, between 0 to 4 m deep, more frequently around 0-2 m deep (Deudero *et al.*, 2005). Our records in Chafarinas Islands agree with this statement.

Although more research is needed to better assess the impact of *P. gibbesi* on the Mediterranean coastal communities (Katsanevakis *et al.*, 2011), this species has been included in the Spanish Catalogue of Invasive Exotic Species (Real Decreto 630/2013).

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