

1302. CALYX NICAENSIS (RISSO, 1826) (PORIFERA, DEMOSPONGIAE). IS IT A RARE AND THREATENED SPECIES?

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In the Mediterranean Sea, filter feeders such as sponges and octocorals are among the phyla most affected by extended mortality events. Regarding sponges, their occurrence is ephemeral after a disease and only the precise documentation of a previous presence can demonstrate their sudden disappearance. The lack of a documented baseline does not allow knowing if this species is rare or actually endangered by anthropogenic impacts. Here we gather all the reports we found on the demosponge *Calyx nicaensis*, a species that seems to be under fast regression in the NW Mediterranean Basin.

Distribution.

Bathymetric range 10 - 400 m depth

Habitat. *Posidonia oceanica* meadows and coralligenous and pre-coralligenous habitat.

Sediment collection.

Its cup-shaped morphology (A-C) lead to entrapment of sediments. It seems *C. nicaensis* closes the osculum when filled by sediments, an unusul response respect other similar species (H-M)

Asexual reproduction.

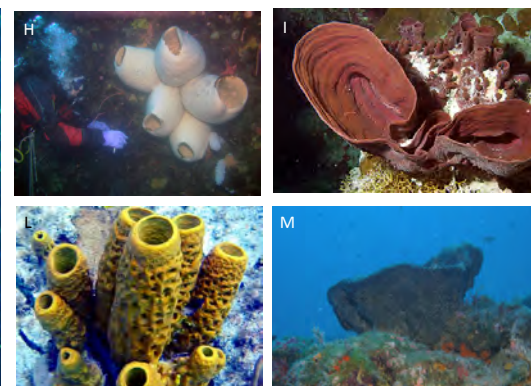
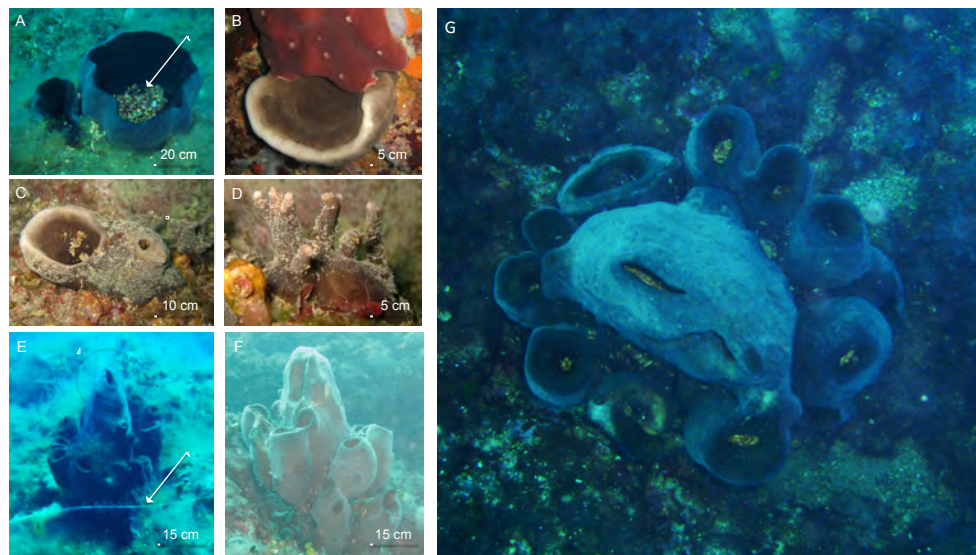
Production of buds developing from the sponge base (D-F). This strategy is uncommon among sponges but it is present in other cup-shape species such as the tropical *Xestospongia muta* (I) and the Antarctic hexactinellid *Anoxycalyx joubinii* (H).



● Before 1999 (1862-1987)

● After 1999 (2000-2013)

Comparison between budding and sediment collection in *C. nicaensis* and other cup-shaped sponges



Author	Year	Site	State	Depth
Schmidt	1862	Kvarner Gulf	Croatia	-
Balsamo & Crivelli	1863	Naples	Italy	-
Topsent	1925	Naples	Italy	-
Topsent	1928	Tolon	France	20-50m
Tortonese E.	1958	Punta Torretta, Portofino	Italy	30-40m
Vacelet J.	1960	Corsica Channel	France	335-367m
Rubio M.	1971	Blanes	Spain	-
Fattorusso et al	1975	Taranto Bay	Italy	-
Benito J.	1981	Itea-Calpe-Benidrom	Spain	-
Le Granchè P.	1983	Anse de Fico, capo di Feno, Corse	France	wreck
Juan A	1987	PN Acantilados de Maro-Cerro Gordo (Andalucia)	Spain	-
Ocana et al	2000	(Andalucia)	Spain	-
Anonymous	2002		Cyprus	13-14m
Mustapha	2003		Tunisia	-
Pansini-Longo	2003	Review		-
Kefalas et al.	2003	Aegean Sea	Greece	30-60m
Voultsiadou	2005	Aegean Sea	Greece	3-10m
Horst D.	2006	Cap Antibes	France	13m
Maran V.	2007	Sec de la Jaune Garde, Porquerolles	France	15m
Baldaqconi	2007-08	Porto Cesareo	Italy	30m
Pansini Longo	2008	Review		-
Manuel Maldonado	2008	punta de la Mona (Andalucia)	Spain	-
Horst Dominique	2009	Cap Antibes	France	13m
Koukouras &				
Athanasios	2010		Greece	-
Villechalane Marc	2010	Cap Sormiou, Marseille	France	18m
Mačić V.	2010	Lustica Peninsula,	Montenegro	10-12m
Baldaqconi R.	2010-12	Nardò	Italy	3m
Anonymous	2011	Al-Gomas	Lybia	-
Frédéric A.	2011	Sec de la Jaune Garde, Porquerolles	France	18m
Baldaqconi R.	2011	Palmy	Italy	30m
Baldaqconi R.	2011	Otranto	Italy	10m
Frédéric A.	2011	Sec de la Jaune Garde, Porquerolles	France	18m (necrotic)
Molinari & Bernat	2011	Lustica Peninsula	Montenegro	14 m
Lakhrach et al	2012	Gabes Gulf	Tunisia	31-45m
Hollebecq C.	2012	île de Jarre, Marseille	France	8m
Mačić & Molinari	2012	Lustica Peninsula	Montenegro	26 m
Greenpeace	2012	Banco Aventura	Italy	50 m
Volkan & Erdogan		Datca Bozburun	Turkey	
Cerrano C.	2013	Gallinara Island	Italy	14 m

Its distribution is documented in many areas of Mediterranean Sea suggesting the lack of a relation with sea water temperature. The findings of *Calyx nicaensis* here reported cannot confirm this species is in a regressive phase but for now it is to be considered a rare species, threatened by human activities especially in areas where uncontrolled coastal development is running.