

Codium arabicum Kützing

Relevant synonyms
Codium adhaerens var. *arabicum*
 (Kützing) P.L.Crouan & H.M.Crouan
Codium coronatum Setchell

Habit. Bar = 2 cm.



Photo: by courtesy of Prof. G. Bitar (Mediterranean, Lebanon).

Short description

Medium (to 20-25 cm in diameter); encrusting cushion, green to dark green, flat and irregularly lobed; utricles frequently composite (a mother-utricle bears several daughter-utricles), cylindrical with apex rounded, 98-200 (-253) μm in diameter and 349-770 (-922) μm long; gametangia, to 110 μm in diameter and 240-270 μm long, borne singly 270-300 μm below apex of utricle.

Distinguishing characteristics

The encrusting thallus, green to dark green, flat and irregularly lobed and the utricles frequently composite, cylindrical 98-200 (-253) μm x 349-770 (-922) μm are distinctive; confusion possible with the other encrusting species occurring in the Mediterranean:

- *C. adhaerens* C.Agardh: thallus more closely adherent to the substratum, smooth to folded into ridges weakly raised above the surface, and utricles thinner (usually 40-100 μm x 500-1000 μm);
- *C. coralloides* (Kützing) P.C.Silva: utricles larger (210-440 μm x 1000-1700 μm) and never composite;
- *C. effusum* (Rafinesque) Delle Chiaje: thallus felted dark green and utricles longer (to 750-1600 μm).

Biology / Ecology / Habitat

Intertidal pools and subtidal communities; 0-10m depth, most frequent under low-light conditions; present all year round.

Distribution

Worldwide: described from the Red Sea, Sinai Peninsula (Kützing, 1856); widely distributed in the Indo-Pacific. **Mediterranean:** recorded first in 2007 from Israel, Haifa Bay (Hoffman *et al.*, 2011); successively recorded from Lebanon (Bitar, 2014). The identity and the Indo-Pacific origin of Mediterranean populations have been confirmed by morphological and molecular genetic studies (Hoffman *et al.*, 2011).

Mode of introduction

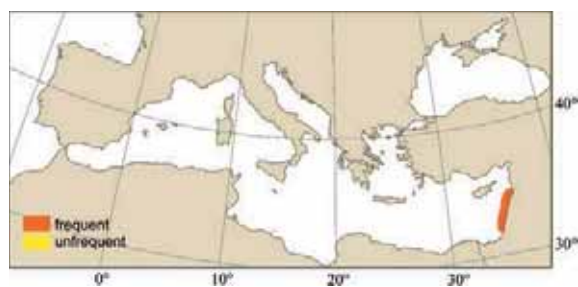
Via the Suez Canal.

Establishment

Well established.

Importance to humans

Invasive.



1st Mediterranean record
Israel, 2011 [2007].

Key references

- Bitar G., 2014. The presence of *Codium arabicum* on the Lebanese coast. In: Kaporis K., Apostolidis C., Baldaconi R., Baştusta N., Bilecenoglu M., Bitar G., Bobori D.C., Boyaci Y.Ö., Dimitriadis C., Djurović M., Dulčić J., Durucan F., Gerovasileiou V., Gökoğlu M., Koutsoubas D., Lefkaditou E., Lipej L., Marković O., Mavrič B., Özvarol Y., Pesic V., Petriki O., Siapatīs A., Sini M., Tibullo D. and Tiralongo F., New Mediterranean Marine Biodiversity records (April, 2014). *Mediterranean Marine Sciences*, 15: 198-212.
- Hoffman R., Shemesh E., Ramot M., Dubinsky Z., Pinchasov-Grinblat Y. and Iluz D., 2011. First record of the Indo-Pacific seaweed *Codium arabicum* Kütz. (Bryopsidales, Chlorophyta) in the Mediterranean Sea. *Botanica Marina*, 54: 487-495.
- Kützing F.T., 1856. *Tabulae phycologicae; oder, Abbildungen der Tange*. Vol. VI, Nordhausen, pp. i-iv, 1-35, 100 pls.