

Padina boergesenii Allender & Kraft

Misidentification

Padina gymnospora (Kützting) Vickers

- a. Dried specimen. b. Habit.
c. Transverse section.
d. Longitudinal section through young
sporangial sorus and hair lines.
Bars: a, b = 1 cm; c, d = 100 μ m.



Photo a: S. Ruiton (Mediterranean, Syria). Photos b: De Clerck and Coppéjans, 1996 (Persian Gulf), with permission from the Senckenberg Research Institute. Drawings: Allender and Kraft, 1983 (Tasman Sea), with permission from CSIRO Publishing Melbourne, Australia.

Short description

Medium (to 10 cm high), fan-shaped, mostly 3 layers of cells throughout, occasionally 2; growing margin inrolled; concentric lines of hair on both surfaces; external calcification slight; in cross-section, central layer and one cortical layer more or less equal in height and usually smaller than the other cortical layer; sporangial sori non-indusiate, separated from each other by a sterile zone delimited by two consecutive hair lines.

Distinguishing characteristics

The blade with 3 layers of cells, one cortical layer taller than the two other layers in cross-section, the external calcification slight, the non-indusiate sporangial sori and the occurrence of sterile zones are distinctive; confusion possible with other fan-shaped Dictyotales occurring in the Mediterranean:

- *Padina boryana* Thivy: 2 layers of cells; very slight calcification; non-indusiate sporangial sori; sterile zone absent;
- *Padina ditristomatica* Ni-Ni-Win & H.Kawai: 2-3 layers of cells, calcification heavier, sporangial sori indusiate;
- *Padina pavonica* (Linnaeus) Thivy: 3-4 layers of cells; the central layer usually taller than the cortical ones in cross-section; calcification heavier; sporangial sori indusiate;
- *Padina pavonicoides* Ni-Ni-Win & H.Kawai: 3 layers of cells (2 only at the upper margin); no or light calcification; sporangial sori indusiate;
- *Spatoglossum variabile* Figari & De Notaris and *Stypodium schimperi*: growing margin flat, calcification absent.

Biology / Ecology / Habitat

Shallow subtidal communities; annual (spring - autumn).

Distribution

Worldwide: western Atlantic, described from Virgin Islands (Allender and Kraft, 1983), Caribbean; Indian Ocean, India, Pakistan, Indonesia. **Mediterranean:** recorded first in 1962-1965 from Israel (Ramon and Friedmann, 1966, as *P. gymnospora*); successively recorded in Italy, Sicily (Sortino, 1967, as *P. gymnospora*); Libya (Nizamuddin, 1981, as *P. gymnospora*); Syria (1997, M. Verlaque, unpublished data); Lebanon (Bitar *et al.*, 2000); Maltese Islands (Sciberras and Schembri, 2007; to confirm).

Mode of introduction

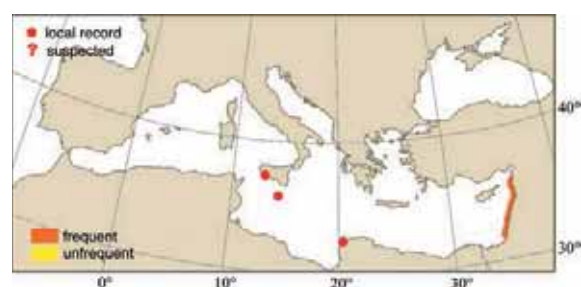
Via the Suez Canal.

Establishment

Well established.

Importance to humans

None.



1st Mediterranean record
Israel, 1966 [1962-1965].

Key references

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