

Padina boryana Thivy**Relevant synonyms**

Padina commersonii Bory de
Saint-Vincent
Padina tenuis Bory

- a. Habit. b. Dried specimen. c. Detail of fertile blade. d. Longitudinal section of apex. e. Longitudinal section through sporangial sorus and hair lines. f, g. Longitudinal sections. Bars: a, b = 1 cm; c = 5 mm; d = 140 μ m; e-g = 45 μ m.

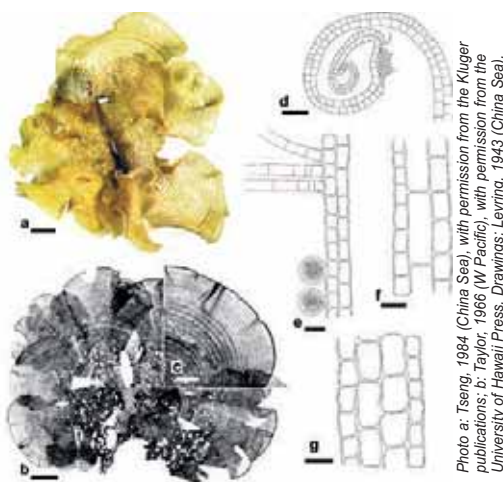


Photo a: Tseng, 1984 (China Sea), with permission from the Kluger publications; b: Taylor, 1966 (W Pacific), with permission from the University of Hawaii Press. Drawings: Levring, 1943 (China Sea).

Short description

Medium (to 20 cm high), fan-shaped, 2 layers of cells throughout except the basal portion (3-4 layers); growing margin inrolled; concentric lines of hair obvious on one surface and rudimentary or absent on the other; external calcification very slight, sporangial sori, non-indusiate, adjacent to each hair band and not separated from each other by a sterile zone.

Distinguishing characteristics

The blade with 2 layers of cells, the non-indusiate sporangial sori, and the absence of sterile zones are distinctive; confusion possible with other fan-shaped Dictyotales occurring in the Mediterranean:

- *Padina boergesenii* Allender & Kraft: 3 layers of cells; one layer usually taller than the two others in cross-section, slight calcification; sporangial sori non-indusiate; sterile zones present;
- *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* (Kützing) Verlaque & Boudouresque: growing margin flat, calcification absent.

Biology / Ecology / Habitat

Shallow subtidal communities; annual (spring - autumn).

Distribution

Worldwide: Pacific Islands, described from Tonga Islands, (Taylor, 1966), Samoan Archipelago, French Polynesia; north-western Pacific, Japan, China, Vietnam; Indian Ocean, widely distributed; eastern Atlantic, São Tomé.

Mediterranean: recorded first in 1974 from Libya (Nizamuddin, 1981, as *P. tenuis*); successively recorded in Egypt (Aleem, 1993, as *P. tenuis*). We consider that the list of records from other Mediterranean countries in Nizamuddin (1981, as *P. tenuis*) is doubtful.

Mode of introduction

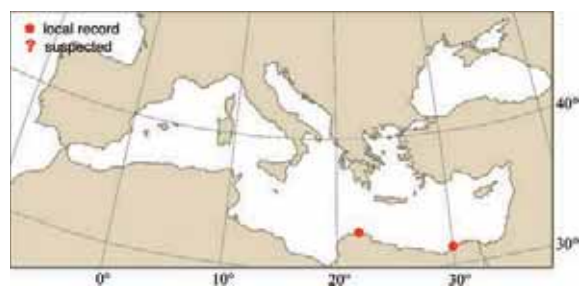
Via the Suez Canal.

Establishment

Well established.

Importance to humans

None.



1st Mediterranean record
Libya, 1981 [1974].

Key references

- Aleem A.A., 1993. *Marine algae of Alexandria*. pp.135. Alexandria: Privately published.
- Levring T., 1943. Meeresalgen von Singapore und Celebes. Meddelanden från Göteborgs Botaniska, Trädgård 15, 175-179.
- Nizamuddin M., 1981. Contribution to the marine algae of Libya. Dictyotales. *Bibliotheca Phycologica*, 54: 1-122, XXXIX plates, 1 map.
- Taylor W.R., 1966. Records of Asian and western Pacific marine algae, particularly algae from Indonesia and the Philippines. *Pacific Science*, 20: 342-359, 2 figs.
- Tseng C.K., 1984. *Common seaweeds of China*. Science Press, Beijing. Kugler Publications, 316 p.