

Chorda filum (Linnaeus) Stackhouse

Relevant synonym

Fucus filum Linnaeus

- a. Dried specimen. b. Surface view of basal portion. c. Surface view of the inside of axis.
 d. Surface view of cortex with sporangia and hairs.
 e. Transverse section with unilocular sporangia and paraphyses.
 f. Transverse section of basal portion.
 Bars: a = 1 cm;
 b-f = 50 μ m.

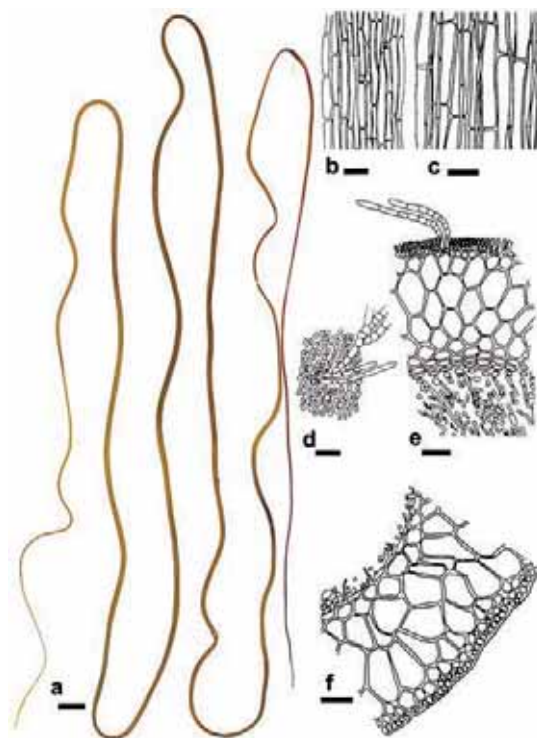


Photo: S. Rufflon and drawings: Ben Maiz, 1986a (Mediterranean, Thau).

Short description

Large (sporophytes to 4-5 m high, usually 1-1.5 m), thread-like, cartilaginous; axis tube-like, simple, frequently twisted, with a cortex and a medulla; central

cavity with internal percurrent filaments; cortical cells with several discoid plastids; fertile plants entirely covered, except for the basis, by unilocular paraphyses and unilocular sporangia; gametophytes microscopic.

Distinguishing characteristics

The very large thread-like thallus, simple and the cartilaginous texture are distinctive; confusion possible with:

- *Scytosiphon* spp. when young: texture not cartilaginous, internal filaments lacking and cortical cells with one plastid.

Biology / Ecology / Habitat

Coastal lagoons; shallow subtidal communities; annual (spring - summer).

Distribution

Worldwide: described from the Atlantic Ocean (Linnaeus, 1753, as *Fucus filum*); north-eastern Atlantic, from Greenland to Canary Islands; north-western Atlantic, from Canadian Arctic to New Jersey; Baltic Sea; North Sea. **Mediterranean:** recorded first in 1899 from Greece, Lesvos Island (Candargy, 1899); successively recorded in France, Etang de Thau, in 1981 (Riouall, 1985), and Turkey (Zeybek *et al.*, 1986). According to Gerloff and Geissler (1974) and Athanasiadis (1987), the record from Greece is probably based on a misidentification. Hamel (1938) mentioned one specimen collected at Nice (France) in the XIX^e century and deposited in the Thuret Herbarium. The identity of Mediterranean specimens requires confirmation because an introduction of *Chorda asiatica* Sasaki & Kawai, a Japanese species very similar to *Chorda filum*, cannot be excluded.

Mode of introduction

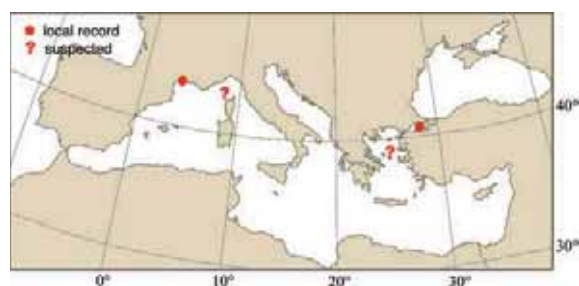
Accidental, probably transferred with oysters imported for farming.

Establishment

Well established in the Etang de Thau.

Importance to humans

None.



1st Mediterranean record
Greece, 1899 [no collecting date]; France 1985 [1981].

Key references

- Ben Maiz N., 1986a. *Flore algale (Rhodophyta, Phaeophyceae, Chlorophyceae, Bryopsidophyceae) de l'Etang de Thau (Hérault)*. PhD. Thesis, Ecology, Université Aix-Marseille II, France, 354 p.
- Candargy P.C., 1899. *La végétation de l'île de Lesbos (Mytilène)*. PhD. Thesis, Université de Paris pp. i-xxxvi, 1-62, pl. 12-16.
- Hamel G., 1938. *Phéophycées de France. Fasc. IV*. pp. 241-336 Paris.
- Linnaeus C., 1753. *Species plantarum*. Vol. 2 pp. [j], 561-1200. Holmiae [Stockholm]: Impensis Laurentii Salvii.
- Riouall R., 1985. Sur la présence dans l'Etang de Thau (Hérault, France) de *Sphaerotrichia divaricata* (C. Agardh) Kylin et *Chorda filum* (L.) Stackhouse. *Botanica Marina*, 27: 83-86.