



Perennial submerged marine herb, with horizontal rhizomes. Branched flowering stem over 1.0 m long, hairlike green leaves up to 20–50 cm long. The inflorescence is 10 cm long, male and female flowers in separate alternating clusters. The fruit is a nutlet with a transparent coat containing the seed.

### Distribution and ecology

Circumpolar wide-temperate distribution. In CE countries only in DE and PL where it grows in the subtidal zone, on gravel, sand or sandy mud. Avoids brackish water or very exposed coasts. It occurs up to depths of 4 m, forming dense sub-tidal meadows. This species declined throughout Europe after a major outbreak of wasting disease in the 1930s, attributed to the microorganism *Labyrinthula macrocystis*.

### Anatomy

Round shoot with a diameter of 1–3 mm.

A large cortex and an epidermis surround a small central cylinder (1, 2).

Central cylinder: An area of larger and smaller, but poorly differentiated unligified cells surrounds a center with an air duct (2). Fibers and vessels are absent (2). Angular cells probably

represent sieve tubes (2). Cell walls are not structured, therefore it is impossible to determine the type of cells (2). The endodermis consists of unligified thin- or thin- to thick-walled cells (2).

Cortex: The cortex consists primarily of parenchyma cells (3, 4). The outer part contains small (1) and the central part net-like intercellulars. The epidermis is thin-walled (4). Crystal sand occurs in the outer part of the cortex.

