



Codium fragile

Common names: Dead man's fingers, Green sponge fingers, Velvet horn, Sponge tang.

Irish names: Spúinse, Beanna veilbhte.

Phylum: Chlorophyta
Class: Ulvophyceae
Order: Bryopsidales
Family: Codiaceae
Genus: *Codium*
Species: *C. fragile*



Fig 1. Underwater plants of *Codium fragile*.

Morphology

- Green alga, with a frond dark-green to black-green 15 to 40 cm long.
- Several main branches of ~5 mm diameter arising from a small basal disc. Generally dichotomously branched. Older branches support epiphytes.
- Characteristic spongy texture, branches round in cross-section.
- *Codium fragile subsp. fragile* is the most common *Codium* in Ireland. It is a non-native species. *Codium fragile subsp. atlanticum* likely to be the native species of Ireland. *Codium tomentosum* and *Codium bursa* are also found in Ireland.



Fig 2. Morphology.

Reproduction

- *Codium fragile* is the macroscopic phase of a two-stage-life-cycle. Reproductive structures are located on the tips of the sporophytes.
- ♀ *Codium subsp. atlanticum* plants, male and female structures occur in separate individuals.
- ♀ *Codium fragile subsp. fragile*, reproduction is parthenogenetic, female gamete germinates without fertilisation.

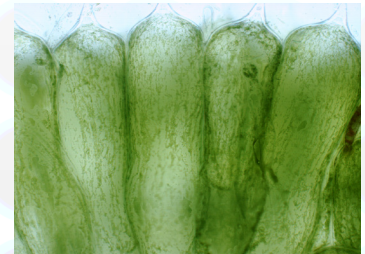


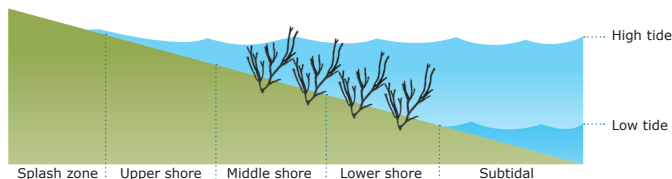
Fig 3. Detail of utricles (tips) of *C. fragile* under the microscope.



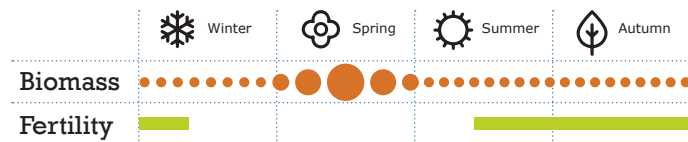
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Distribution and habitat

- Worldwide distribution in marine environments.
- On rock and encrusting coralline algae in rock-pools in the mid intertidal and on open rock surfaces from mid to lower littoral, down to 1-2 m.



Seasonality



Note: These seasonal characteristics may vary slightly from year to year.

Wild resource and cultivation



interesting facts

- Elysia viridis* is a small green sea slug with iridescent spots that feeds on *Codium fragile* sp. and retains the seaweed's chloroplasts (site of photosynthesis within algal cells). Once eaten, the chloroplasts continue to function and are a source of energy to the sea slug.
- In Ireland, the type locality of *Codium fragile* subsp. *atlanticum* is Clare Island and *fragile* subsp. *fragile* was first reported in the 1930s.
- Codium* spp. are cultivated worldwide. When



in tank culture, branched specimens of *Codium tomentosum* develop into spiky ball-like structures due to the water movement.

- The flavour of *Codium* has been reported to be similar to goose barnacles.

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