



# *Fucus spiralis*

**Common name:** Spiralled wrack.

**Irish names:** Feamainn bharr chladaigh, Casfheamainn.

**Phylum:** Ochrophyta  
**Class:** Phaeophyceae  
**Order:** Fucales  
**Family:** Fucaceae  
**Genus:** Fucus  
**Species:** *F. spiralis*



Fig 1. Plants of *Fucus spiralis*.

## Morphology

- Brown alga with somewhat irregular branched fronds. Dichotomous flattened fronds evenly forked with a distinct midrib. Fronds are often twisted or 'spiral'.
- The fronds are olive green to light brown in colour when fresh. Fronds can be up to 30 cm long and 2 cm thick.
- Finger-shaped swellings may occur on the frond; this is not an air bladder but a buildup of gases within the thallus.
- Other species of this genus found in Ireland are *F. vesiculosus*, *F. serratus*, *F. ceranoides*, *F. macroquiryi*, rarely *F. distichus* and *F. cottonii*.

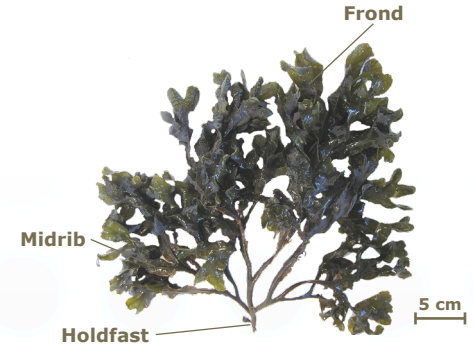


Fig 2. Morphology.

## Reproduction

- *Fucus spiralis* reproduces both through self-fertilisation as well as cross-fertilisation when gametes are released externally (see LC5\*).
- Reproductive individuals can be easily identified. The tips of the fronds with the reproductive structures have a knobby appearance, and are usually found in pairs.



Male and female structures occur in the same individual (hermaphroditic).



Fig 3. Fertile receptacles of *Fucus spiralis*.

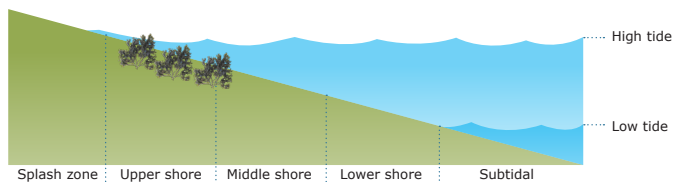
\*Note: Life-cycle 5 (LC5) on page 4.



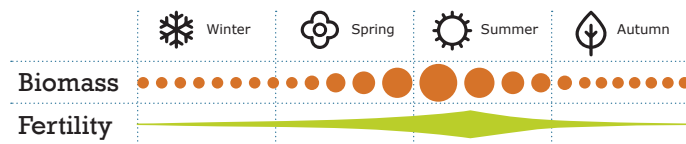
## *Fucus spiralis*

### Distribution and habitat

- It is found on the Atlantic coasts of Europe and North America; W Mediterranean, Spain to Morocco and NE Pacific from Alaska to Washington.
- A common seaweed found on the upper shore of sheltered rocky shores. Also can be found in very sheltered shores like the head of sea lochs and in salt marsh vegetation.



### Seasonality



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

### Wild resource and cultivation



## interesting facts

- *Fucus spiralis* is used in Ireland in body care products, seaweed baths and as fertiliser.
- It has the ability to provide protection against oxidative stress.
- *Fucus spiralis* spends 90 % of the time out of the water. It can tolerate a high level of dessication, being able to survive 70 to 80 % water loss.
- On the shore, it usually forms a recognisable band below Channelled Wrack (*Pelvetia canaliculata*).



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