



Fucus vesiculosus

Common name: Bladder wrack.

Irish name: Feamainn bhoilgíneach.

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



Fig 1. Plants of *Fucus vesiculosus*.

Morphology

- Large brown alga with forked, branching fronds supporting many pairs of air bladders either side of a distinct midrib.
- This is the most morphologically diverse of the fucoid species, with individuals varying greatly in size and shape. For example, plants can reach up to 1 m on sheltered shores with many pairs of bladders while at the other extreme on exposed shores, plants seldom exceed 20 cm and have no bladders.
- Different morphologies develop in response to the salinity and wave action e.g. the bladderless forms.

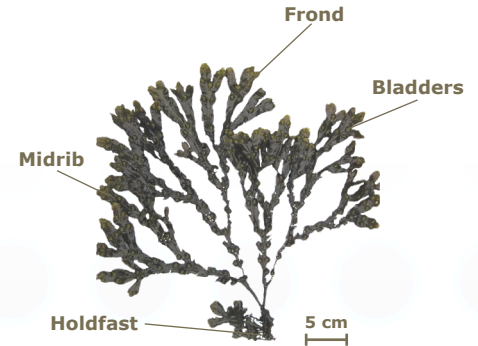


Fig 2. Morphology.

Reproduction

- *Fucus vesiculosus* has a direct life cycle (see LC5*).
- Reproductive individuals can be easily identified. The tips of the fronds bearing the reproductive structures (receptacles) have a bloated, rounded to oval appearance.



Male and female structures occur in separate plants.

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



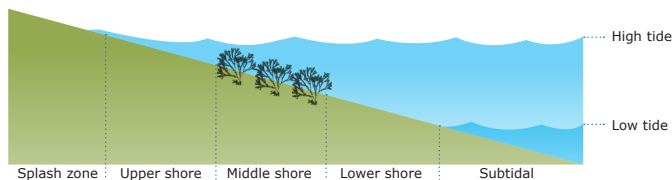
Fig 3. Fertile receptacles of *Fucus vesiculosus*.



Fucus vesiculosus

Distribution and habitat

- This species occurs in NE Atlantic from Greenland to Canary Islands, NW Atlantic from Canadian Arctic to Caribbean, and W Mediterranean.
- A very common seaweed on rocky shores in the mid-intertidal. Can also be found in a wide variety of shores from exposed rocky to sheltered lagoons.



Seasonality



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

Wild resource and cultivation



interesting facts

- Many uses of *Fucus vesiculosus* include fertiliser, body care products like shower gels and body creams, and health supplements such as kelp tablets.
- It can be made into a boiled broth and used as a health drink; reported use as a herbal remedy for treating thyroid problems as it is a good source of iodine.
- Reported bioactive ingredients like free radical phlorotannin antioxidants, bioactive polysaccharides, amino acids, vitamins, and minerals.
- In the early 18th century, it was the original source of iodine and used extensively to treat goitre, a swelling of the thyroid gland related to iodine deficiency.



- Some fucoids can hybridise, with cross-fertilisation occurring between eggs and sperm of different fucoid species. The result is that morphological features of these plants can vary somewhat from parental plants.

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