



# *Saccorhiza polyschides*

**Common name:** Furbelows.

**Irish names:** Claiómh, Madra, Clabhthai.

**Phylum:** Ochrophyta  
**Class:** Phaeophyceae  
**Order:** Tilopteridales  
**Family:** Phyllariaceae  
**Genus:** Saccorhiza  
**Species:** *S. polyschides*



Fig 1. *Saccorhiza polyschides* exposed at low-tide.

## Morphology

- An annual brown kelp with a light to dark brown colour, with a digitate “finger-like” blade, a wide stipe and a large hedgehog-like holdfast.
- The stipe is large and flat, with characteristic marginal undulated wings near the base.
- The holdfast of mature individuals is a hollow bulbous structure up to 50 cm wide of a yellow-brown colour covered in smooth short spikes.
- Usually individuals are 3 to 4 m long, but occasionally they can grow up to 10 m length.
- A single individual can weigh up to 22 kg.

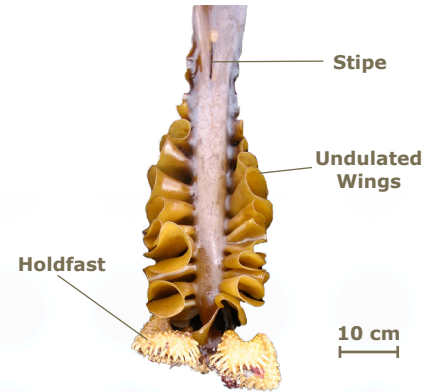


Fig 2. Morphology.

## Reproduction

- *Saccorhiza polyschides* sporophytes are the macroscopic phase of a two-stage life-cycle (see LC4\*).
- The reproductive tissue (sorus) appears as slightly raised and darkened areas on the undulated part of the stipe.

♂ Male and female gametes occur on separate microscopic individuals (gametophytes).



Fig 3. Detail of the sorus on the stipe.

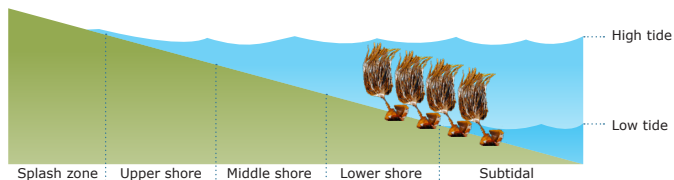
\*Note: Life-cycle 4 (LC4) on page 4.



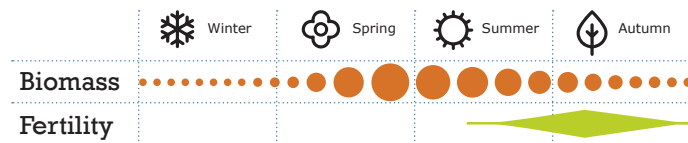
## *Saccorhiza polyschides*

### Distribution and habitat

- Limited to the N Atlantic Ocean, found from Norway to Morocco.
- Sublittoral species present in exposed to sheltered shores.



### Seasonality



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

### Wild resource and cultivation



## interesting facts

- This is the largest brown alga in Europe. As an annual species it grows very rapidly and was therefore cultivated at an experimental scale for its biomass.
- Its shape is highly dependent on hydrodynamic constraints.



- As an opportunistic species, *S. polyschides* fills spaces made in kelp beds after intense harvesting of *L. digitata*, or when *L. hyperborea* individuals are torn off by storms.
- This species has been cultivated experimentally on long-lines in Ireland.

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