

***Prasiola crispera* (Lightfoot) Kützing 1843: 295**

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Basionym:

Ulva crispera Lightfoot 1777: 972

Type Locality:

“upon the ground in shady places, at the foot of walls and houses”—in Scotland (Lightfoot 1777)

Habitat:

On rock, in the supralittoral zone; locally abundant at sites where seabirds guano or other sources of organic nitrogen are available. This species is also found in terrestrial habitats (Rindi *et al.* 1999).

Northeast Pacific Distribution:

Bering Sea and Aleutian Islands, Alaska, to northern Washington; Arctic coast of Alaska (Scagel *et al.* 1989).

Vegetative morphology:

In its normal habit, this species consists of monostromatic blades. In small specimens, these are rounded or spatulate and have a smooth, regular margin (**Fig. 1**). As they enlarge, the blades assume an irregular shape; the margins tend to curl and the plants become folded, forming irregular dark green thalli up to 4-5 cm long and wide. In surface view, the cells are quadrate or rectangular, 2 - 5 × 5 - 10 µm long and wide, usually arranged in regular horizontal and vertical rows (**Fig. 2**). Thickened walls, which separate clusters of cells, are common in this species. Some thalli of this species consist of uniseriate filaments 12-25 µm wide, formed by cells 2-6 times as wide as long. Usually the uniseriate filaments divide anticlinally and produce narrow, ribbon-shaped blades; by subsequent growth, such blades can expand to produce the normal rounded morphology. In some populations all stages, from the uniseriate filaments to the expanded blades, including all intermediate forms, can be observed (**Fig. 3**) (Rindi *et al.* 1999).

Reproductive morphology and Life History:

Sexual reproduction is unknown. The only specialized form of reproduction known in this species is release of akinetes in decaying thalli. Upon germination, akinetes grow into aplanosporangia, which subsequently release a variable number of aplanospores. The aplanospores germinate to produce new thalli. However, vegetative reproduction by fragmentation and separation of thalli seems to be the most common form of replication in this species.

References:

Lightfoot, J., 1777. *Flora Scotica*. Ed. 1. Vol. 2. B. White, London, pp. 531-1151.