Prasiola delicata Setchell & N.L. Gardner 1920: 291

Contributed by Fabio Rindi

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Type Locality:

Sitka, Alaska, USA.

Habitat:

On rock, forming thin green mats at or near upper tide mark (Setchell & Gardner 1920). Reported to form a belt up to 1.5 m on vertical exposed rock in Hokkaido, Japan (Yamada & Kurogi 1974).

Northeast Pacific Distribution:

Sitka, northern Southeastern Alaska (the type locality). Material in general agreement with the morphology of this species has been recently collected in Vancouver, British Columbia (Rindi & Guiry, pers. observ.). This species has probably been overlooked and is likely more widely distributed than these records indicate.

Vegetative morphology:

Individual specimens are up to 1.5 mm high and consist of a rounded, heart-shaped or broadly oblong blade attached to the substratum by a stipe. The stipe is usually short, and in some specimens it is hardly observable (the attachment can be more properly defined as a rhizoidal holdfast, rather than a real stipe). In adult specimens, the margins become crisped and inrolled, and large thalli often show a spoon-like or cup-shaped habit. In the vegetative condition the blade is monostromatic, 17-28 µm thick. The cells are not grouped into distinct areas, and no thickened walls forming lines are observable. In surface view, the cells are quadrate or rectangular, 4-12 µm long and wide.

Reproductive morphology and Life History:

The only form of reproduction known for this species is the production and release of aplanospores. It is presumed that the life cycle consists of a repetition of the same morphological phase, reproducing by aplanospores. Production of aplanospores starts in the upper parts and gradually expands to most of the blade, except the basal parts. In mature specimens, the fertile parts of the blade reach 40 µm thick (up to 8 cell layers). An original mother cell may produce up to 512 aplanospores.

Important References:

Setchell, W.A. and N.L. Gardner, 1920. Phycological contributions, I. Univ. of California Publ. Botany 7: 279-324.

Yamada, I. and M. Kurogi, 1974. *Prasiola delicata* Setch. et Gardn. (Chlorophyta) found at Akkeshi in eastern Hokkaido. Journal of Japanese Botany 49 (12): 363-370.

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