
By Kingo MIYABE, M.I.A.
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In his first contribution to the systematic of Phaeophyceae, O. C. Schmidt\(^1\) has recently transferred *Laminaria japonica* Aresch. and *Laminaria angustata* Kjellm. to the genus Pleurophycus of Setchell and Saunders on account of the presence of longitudinal fold or folds on the blade.

Pleurophycus is, however, a unique genus growing on the shores of Alaska down southward to the State of Oregon. At present it is represented by a single species, *Pleurophycus Gardneri* Setch. et Saund.\(^2\) The frond in Pleurophycus is Laminaria-like in appearance with distinct branched holdfasts, stipe and blade. The blade is provided with a single percurrent, median, rather broad, shallow, midrib-like “furrow.” On each side of this median “fold,” there is a narrow trench-like fold with distinct raised margins and irregular protuberances on the inside of the fold, giving it an appearance of a series of small undulations. Those trench-like folds are distinctly seen in a dried specimen. In this species mucilage ducts are wanting in both stipe and blade.

Setchell and Gardner\(^4\) have placed the genus Pleurophycus together with Cymathaere in their new Tribe Cymathaereae in the Laminariaceae, characterized by the blade being provided with one or more longitudinal folds. To this view, Schmidt has concurred.

The nature of the folds in Pleurophycus is, however, very different from that in Cymathaere. Much more so, it is in the case of *Laminaria japonica* and *Laminaria angustata*.

In *Laminaria japonica*, a larger shallow fold is prominently seen in a fresh condition on each side of a broad, thick, median fascia. But the folds disappear on drying.

In *Laminaria angustata*, the median narrow fascia forms a single central longitudinal fold distinctly seen in a fresh condition; but the fold becomes indistinct when the plant is dried.

It is well for the present to retain our two species in the genus Laminaria in a broad sense.

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3) Saunders, De Alton,—The Algae of the Harriman Alaska Expedition. (1901), p. 427, pl. LII.
Fig. 1. Cross section of the blade of Laminaria japonica at about \( \frac{1}{3} \) of the whole length from the base in a fresh condition. \( \frac{1}{4} \) natural size.

Fig. 2. Cross section of the blade of Laminaria angustata at about \( \frac{1}{4} \) of the whole length from the base in a fresh condition. Natural size.

Fig. 3. Cross section of the blade of Pleurophycus Gardneri at about \( \frac{1}{3} \) of the whole length from the base from the dried specimen collected at west coast of Whidbey Island, Washington, distributed by Prof. Gardner. \( \times 2 \).