

Typification of *Streptophyllopsis kuroshioensis* (SEGAWA) KAJIMURA (Phaeophyta, Laminariaceae)*

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A lectotype was selected from syntypes for the basionym of *Streptophyllopsis kuroshioensis* (SEGAWA) KAJIMURA which is a deep-water species of Laminariaceae in Phaeophyta endemic to Japan.

Key Index Words: Deep-water species; endemic species; Japan; Laminariaceae; Phaeophyta; *Streptophyllopsis kuroshioensis*.

The basionym *Hedophyllum* (?) *kuroshioense* SEGAWA was reported by SEGAWA (1948) from deep-waters off Izu Province in Shizuoka Prefecture on the Pacific coast of Honshu. However, he could not collect sufficient specimens of this alga to make a detailed study. I was fortunate enough to discover this alga growing in the deep-waters in the Oki Islands, Shimane Prefecture, and I collected abundant specimens upon which I made a detailed study and proposed a new generic name *Streptophyllopsis* (KAJIMURA 1981). However, no validated type specimen has been chosen for *S. kuroshioensis* (SEGAWA) KAJIMURA.

Materials and Methods

I have chosen a lectotype from among the three syntypes of the basionym collected by SEGAWA off Tôji, Izu Province on April 29, 1938 which are deposited at the Institute of Fisheries, Faculty of Agriculture, Kyushu University, Fukuoka, Japan. I have followed Article 7 and the Guide for the Determination of Types (Voss *et al.* 1983).

Typification

In 1948 SEGAWA described the basionym of *Streptophyllopsis kuroshioensis* (SEGAWA) KAJIMURA as a result of his observations on the four sterile specimens collected from deep-water off Izu Province on the Pacific coast of middle Honshu. He considered it as a possible new species of *Hedophyllum*, *H.* (?) *kuroshioense* SEGAWA. SEGAWA remarked that, "The reason to place provisionally the present new alga under the genus *Hedophyllum* is that it has some resemblance to *H. subsessile* in the advanced stage bearing the bifurcate arms. The present plant, however, differs distinctly from the latter by having the bifurcate arms characteristically metamorphosed as shown above. Namely, *H. subsessile* has the arms which are decumbent, somewhat long, much concave. In *H. kuroshioense* such portion is very compact, metamorphosed into two parts, a short, compressed stipe and a globular protuberance. Moreover, the secondary blades of *H. subsessile* split into many segments and are much concave near the base, while in *H. kuroshioense* they are undivided and slightly concave. Though there are such distinct differences existing between these species,

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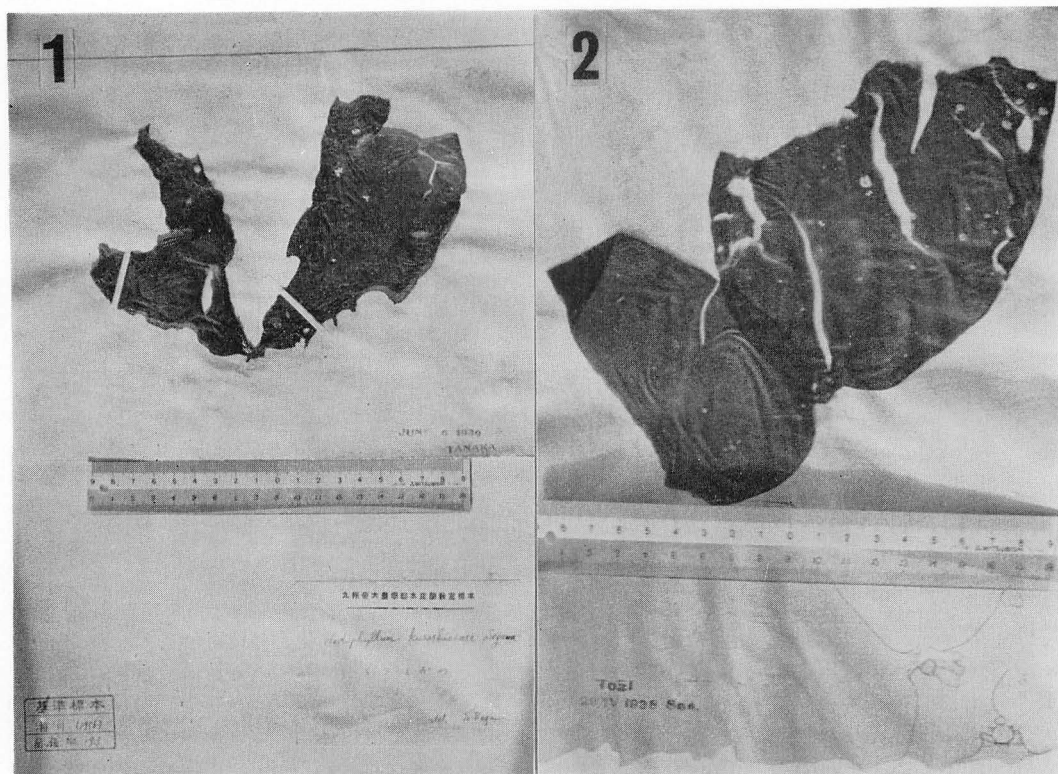


Fig. 1. The specimen of *Streptophyllopsis kuroshioensis* (SEGAWA) KAJIMURA collected by TANAKA on June 6, 1939 without indication of locality and selected by SEGAWA for the "type" in 1956.

Fig. 2. The designated lectotype of *Streptophyllopsis kuroshioensis* (SEGAWA) KAJIMURA collected by SEGAWA off Tōji, Izu Prov. on April 29, 1938.

it seems that the general appearance of such advanced form bearing secondary arms is the same between these species." On the basis of my observations of numerous specimens of this alga collected from deep-waters in the Oki Islands, I consider this alga to be fundamentally different from *Hedophyllum* (SETCHELL 1901) not only in not having a longitudinal bifurcation in the blade, but also in having both a perennial prostrate branch with perennial haptera and an annual blade (KAJIMURA 1981).

I considered this alga distinct to the allied genera *Streptophyllum* (NAGAI 1940) and *Laminaria* (LAMOUROUX 1813). *Streptophyllopsis* has a perennial prostrate branch and haptera whereas *Streptophyllum* does not. Rhizome-bearing *Laminaria* (e.g. *L. longipes* BORY), which have this perennial

system also have several distinct, perennial stipes (SETCHELL and GARDNER 1925). On the other hand, this alga resembles *Streptophyllum spirale* (YENDO) MIYABE et NAGAI in the decumbent condition of its weakly stipitate blade which suggested the proposed name *Streptophyllopsis* (KAJIMURA 1981).

Three of the four specimens of the basionym cited by SEGAWA in his protologue were all collected by himself off Tōji, Izu Province on April 29, 1938 but I could not find the one of these four illustrated by SEGAWA (1948, fig. 1-C). I found that SEGAWA had failed to designate the holotype of the basionym, but SEGAWA chose a specimen collected by TANAKA on June 6, 1939 without indication of its locality, for the "type" which was indicated on its herbarium sheet by

a Japanese stamp that means "type specimen" in 1956 (Fig. 1). It was considered to be chosen by SEGAWA probably for the lectotype of the basionym, but I could not consider it to be validated as the lectotype because SEGAWA apparently did not cite it in his protologue (SEGAWA 1948). Consequently I have chosen the lectotype from among the three syntypes and it is deposited in the phycological herbarium of Institute of Fisheries, Faculty of Agriculture, Kyushu University, Fukuoka, Japan.

Streptophyllopsis kuroshioensis (SEGAWA) KAJIMURA, Mem. Fac. Sci., Shimane Univ. 15: 75–87, figs 1–27, 1981.

Basionym: *Hedophyllum* (?) *kuroshioense* SEGAWA, Jour. Fac. Agri. Kyushu Univ. 9(1): 59–63, fig. 1, 1948.

Japanese name: Kuroshioeme.

Lectotype: Institute of Fisheries, Faculty of Agriculture, Kyushu University (Tōji, Izu Prov., Apr. 29, 1938).

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梶村光男：クロシオメ（褐藻植物門，コンブ科）のタイプ標本の選定

日本固有種である深海性の褐藻，コンブ科クロシオメの basionym における選定基準標本を等価基準標本から選定した。(685 隠岐郡西郷町大字加茂194 島根大学理学部附属臨海実験所)