Lectotypification of Leptosiphonia schousboei and Ophidocladus simpliciusculus (Rhodomelaceae, Rhodophyta)

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Abstract – Lectotypes for the red algae *Polysiphonia schousboei* (=*Leptosiphonia schousboei*) and *P. simpliciuscula* (=*Ophidocladus simpliciusculus*) were designated here after the examination of original material housed in the Muséum national d'Histoire naturelle de Paris (cryptogamy collections, Herbier National).

Leptosiphonia schousboei / nomenclature / Ophidocladus simpliciusculus / Polysiphonia / typification / Rhodomelaceae

INTRODUCTION

schousboei (Thuret) Kylin Leptosiphonia and *Ophidocladus* simpliciusculus (P.L. Crouan et H.M. Crouan) Falkenberg were originally described as members of the genus *Polysiphonia* and were subsequently segregated to new genera. This was motivated, among others, because they share the peculiar character of having two tetrasporangia per segment, a rare feature within the Rhodomelaceae which was already highlighted in their respective protologues (Crouan & Crouan, 1852; Bornet & Thuret, 1876). The two species are common along the Atlantic Iberian Peninsula and detailed morphological descriptions and COI-5P sequences were provided in Díaz-Tapia & Bárbara (2013) based on recent collections. However, the typification of L. schousboei and O. simpliciusculus was pending of the study of their original materials, as holotypes were not designated in their protologues. We had recently the opportunity to study the herbarium of Thuret and Bornet held in the Muséum national d'Histoire naturelle de Paris as well as the one of the Crouan brothers which belong to the marinarium of Concarneau but is currently in Paris for its digitalization. We have examined the original materials of L. schousboei and O. simpliciusculus with the aim to designate their lectotypes.

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RESULTS AND DISCUSSION

Typification of *Polysiphonia schousboei* (=*Leptosiphonia schousboei*)

Bas.: Polysiphonia schousboei Thuret in Bornet & Thuret 1876: 61, pl. XXI

In the protologue, Bornet & Thuret (1876) cited material from Biarritz (south western France) collected by themselves and material from Tanger (northern Morocco) collected by Schousboe. The Thuret and Bornet Herbarium of PC holds 39 specimens collected in Tanger by Schousboe during 1823, 1824 and 1827; and 23 specimens collected in Biarritz by Bornet and/or Thurst during 1868 and 1870 (http://coldb.mnhn.fr/colweb/form.do?model=SONNERAT.www.sonnerat. www.sonnerat.www.sonnerat). All the specimens were examined by us and belong to Polysiphonia schousboei. They were identified by Thuret and must be considered as original material (Art. 9.3, ICBN). Since Thurst did not designate a holotype, all these specimens can be regarded as syntypes. One of the most distinctive features of this species is the presence of two tetrasporangia per segment, a characteristic illustrated in the protologue based on material from Tanger. We therefore here designate the specimen PC0658394 (Fig. 1) which was collected in Tanger in March 1923 as lectotype of Polysiphonia schousboei. Moreover, the specimen PC0658394 is corticated in its basal parts, a feature which has been noted by Bornet & Thuret (1876) and only present in the largest plants. It is noteworthy that the specimen PC0658394 is hand annotated as "Hutchinsia brodiaei (Shousb.)" cited as a synonym of *Polysiphonia shousboei* in the Thuret's protologue. Furthermore, we designated as epitype of Polysiphonia schousboei the specimen PC0542978, which was collected in Tanger in January 1824. This specimen is a male gametophyte that belongs to the collection Cosson who has bought the Schousboe collection from the son of the later. Thurst and Bornet did identify all the specimens bought by Cosson and integrated in their own herbarium parts of Shousboe material entrusted by Cosson.

Typification of Polysiphonia simpliciuscula (=Ophidocladus simpliciusculus)

Bas.: Polysiphonia simpliciuscula P.L. Crouan et H.M. Crouan 1852: no. 302

In the protologue, Crouan & Crouan (1852) cited material collected in a single locality, Anse du Minou (northwestern France), and specimens of *Polysiphonia simpliciuscula* from this locality were distributed as part of their exsiccata (Algues marines du Finistère) as the number 302. The Crouan brothers Herbarium is held in the marinarium of Concarneau (CO), but is currently at the Muséum national d'Histoire naturelle de Paris in order to be digitalized and returned to Concarneau. Nonetheless, we could not find any material of *P simpliciuscula* in the Crouan's herbarium after an exhaustive search. Conversely, we found a specimen corresponding to the Crouan's *exsiccata* in the herbarium of Thuret, which was identified by the Crouan brothers and belongs to *O. simpliciusculus*. We designate here as lectotype of *P. simpliciuscula* this later specimen, PC0581971 (Fig. 2). This is apparently a sterile specimen; with erect axes 3.3 cm long, scarcely branched endogenously and *ca* 23 pericentral cells.

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Fig. 1. Lectotype specimen of Polysiphonia schousboei (PC0658394). Scale bar: 2 cm.

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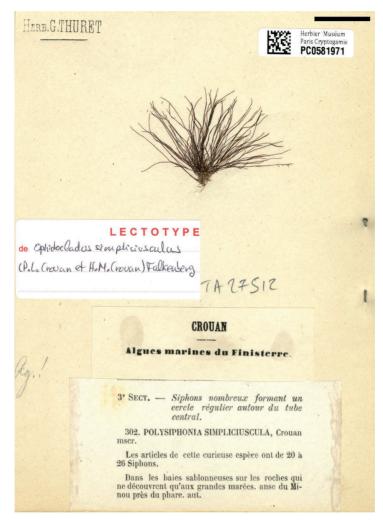


Fig. 2. Lectotype specimen of Polysiphonia simpliciuscula (PC0581971). Scale bar: 2 cm.

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