



Validation of “*Cylindrocystis brebissonii* f. *quadripyrenoidea*” van Oye (Zygnemataceae, Zygnematophyceae)

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In 1959, Paul Herman Gustave van Oye (1886–1969), a Belgian hydrobiologist, described a new form of *Cylindrocystis brebissonii* (Ralfs) De Bary from the Belgian Congo [now Democratic Republic of Congo, DRC] – *C. brebissonii* f. *quadripyrenoidea* van Oye (van Oye 1959: 259). This name was not validly published because it was not accompanied by a Latin description or diagnosis required from 1958–2011 (Art. 44.1, Turland & al. 2025). Additionally, the type of this taxon was not indicated as required Art. 8.1 and was described from two gatherings. Van Oye’s designation is validated below.

Cylindrocystis brebissonii* f. *quadripyrenoidea* van Oye ex Levanets & Cocquyt, *forma nov.

Replaced designation: *Cylindrocystis brebissonii* f. *quadripyrenoidea* van Oye *Hydrobiologia* 12(4): 259, figs 10, 11, *nom. inval.* (as “*Cylindrocystis Brebissonii* Meneghini var. *curvata* Rabanus f. *quadripyrenoidea*”), 1959.

Diagnosis: Differing from the nominal form only by the constant presence of two pyrenoids per semicell (Figs 1, 2).

Dimensions: Length 75–77 µm, width 23–25 µm, length/width ratio 3–3.3 (van Oye 1959).

Holotype: [icon!] van Oye (1959: fig. 10, line drawing of a single cell from a single gathering, ICN Art. 40.6, reproduced here as Fig. 1).

Type locality: Democratic Republic of Congo: marshes in upper Ngovi, near Musaruzi, about 16 km southwest of Uvira [South Kivu Province], at an elevation of about 3.000 m a.s.l., *Sphagnum* aspect, leg. J.-J. Symoens, 4 January 1956.

Registration: <http://phycobank.org/106409>

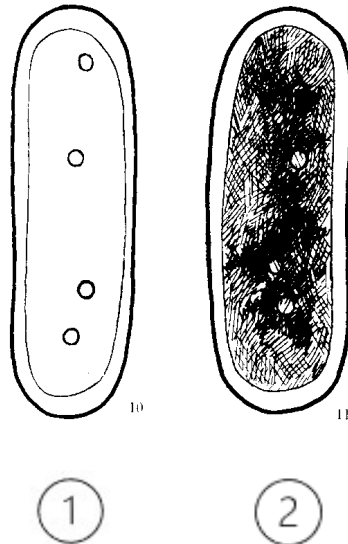
Note: van Oye (1959: 259) indicated that he examined two samples - [Symoens] 2108 and [Symoens] 2110 – where f. *quadripyrenoidea* was found but he did not specify one as the type. Both samples were collected in the same area, marshes in upper Ngovi, near Musaruzi, about 16 km southwest of Uvira, about 3.000 m a.s.l., *Sphagnum* aspect, on the same day, 4 January 1956, and by the same collector (Jean-Jaques A. Symoens, 1927–2014). We would therefore expect the samples to be present in van Oye's collection, but we were unable to find them there. Many samples collected by Symoens are present in the herbarium of the Meise Botanic Garden (BR), but we were unable to find material of this forma. Additionally, we contacted the Burundian and the Congolese (from Uvira) researchers trying to locate exact sampling site. Unfortunately, Musaruzi, near Uvira in DRC, is not a locality known by them. Most likely we assume that it may be an old name or a temporary pastoral village or settlement of a Bantu ethnolinguistic supraethnicity Banyaruanda [Banyarwanda] in Symoens's time.

We are grateful to Yves Samyn, curator of the invertebrate collections of the Royal Belgian Institute of Natural Sciences, Belgium (RBINS), for his helpful comments.

Turland, N.J., Wiersema, J.H., Barrie, F.R., Gandhi, K.N., Gravendyck, J., Greuter, W., Hawksworth, D.L., Herendeen, P.S., Kloppe, R.R., Knapp, S., Kusber, W.-H., Li, D.-Z., May, T.W., Monro, A.M., Prado, J., Price, M.J., Smith, G.F. & Zamora Señoret, J.C. editors (2025). *International code of nomenclature for algae, fungi, and plants (2025 Edition Madrid Code)*.

Regnum Vegetabile. Volume 162. pp. [i]–xlvii, 1–303. Chicago & London: The University of Chicago Press.

van Oye, P. (1959). Quelques Desmidiées dites Arctiques Alpines des marais du sud-ouest d'Uvira (Congo Belge). *Hydrobiologia* 12(4): 251–267.



Figs 1, 2. *Cylandrocystis brebissonii* f. *quadripyrenoidea* Oye ex Levanets & Cocquyt, *forma nov.*.
Fig. 1. Holotype: [icon!] after van Oye (1959: fig. 10). Fig. 2. Isotype, after van Oye (1959: fig. 11).