
Nomenclatural corrections in the green algal genus *Deuterostichococcus* Pröschold & Darienko (*Trebouxiophyceae*)

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The generic name *Deuterostichococcus* Pröschold & Darienko was introduced by Pröschold & Darienko (2020: 135) for four species originally included in *Stichococcus* Nägeli. Included were *Stichococcus deasonii* Neustupa, Eliás & Sejnohová and *S. allas* Reisingl, both of which require further nomenclatural clarification.

Stichococcus deasonii Neustupa, Eliás & Sejnohová was established as new name by Neustupa, Eliás & Sejnohová (2007: 60) for *Hormidium marinum* Deason (Deason 1969: 244) as the prior existence of the valid name *Stichococcus marinus* Hazen (1902:161) blocked a transfer of Deason's name to the genus *Stichococcus*. Although Deason (1969) did not specifically use the words "type" or "typus" in the protologue of *Hormidium marinum*, such a designation was not required at the time (ICN Art. 40.6; Shenzhen Code, Turland *et al.* 2018) and as an "entire gathering" (i.e., a single gathering) was cited, this met the requirements of Art. 40.2 (and thus of Art. 40.1). Silva, Mattox & Blackwell. (1972: 643) transferred this species to *Klebsormidium* and designated a neotype (MU 31022) consisting of dried material selected from culture from the type locality (Dauphin Island Bird Sanctuary, Alabama, USA) provided by T.R. Deason, as no original type material could be found at that time. *Stichococcus allas* Reisingl was described by Reisingl (1964: 489) from Ötztal, Austria, and is morphologically identical to *Chodatia tetrallantoidea* Kol described from Valais in Switzerland by Kol (1934: 280). The generic name *Chodatia* Kol was already preoccupied by *Chodatia* Hansgirg (1903: 2, *adnot.*) for tetrasporalean green alga. While *Chodatia* Hansgirg is also an illegitimate name as it was an unwarranted change of name for *Stapfia* Chodat (Chodat 1897: 947), it is still a valid name and rendered *Chodatia* Kol illegitimate (Art. 53.1). Nevertheless, the included species name is valid and legitimate (Art. 55.1), and *Chodatia tetrallantoidea* Kol thus has nomenclatural priority over *Stichococcus allas* Reisingl.

We therefore propose the following nomenclatural changes (in **bold**):

Deuterostichococcus Pröschold & Darienko, 2020.

Synonym: *Chodatia* Kol, 1934, *nom. illeg.*, *non Chodatia* Hansgirg 1903, *nom. illeg.*

Generitype (designated by Pröschold & Darienko, 2020: 135): *Deuterostichococcus deasonii* (Neustupa, Eliás & Sejnohová) Pröschold & Darienko (2020: 135), an incorrect name the correct name for which is *Deuterostichococcus marinus* (Deason) Pröschold & Darienko *comb. nov.* (below).

Note: While *Deuterostichococcus deasonii* is not an illegitimate name, as it has a basionym, it is incorrect (see Art. 52.4).

Deuterostichococcus marinus (Deason) Pröschold & Darienko, *comb. nov.*

Basionym: *Hormidium marinum* Deason 1969, *Transactions of the American Microscopical Society*, 88, 240-246; neotype designated by Silva *et al.* 1972: MU 31022; epitype (designated

for the neotype by Pröschold & Darienko 2020: 135): strain SAG 2139 permanently cryopreserved at SAG in a metabolically inactive stage.

Homotypic synonyms: *Klebsormidium marinum* (Deason) P.C.Silva, K.M.Mattox & W.H.Blackwell 1972, *Stichococcus deasonii* Neustupa, Eliás & Sejnohová 2007.

Deuterostichococcus tetrallantoideus (Kol) Pröschold & Darienko, *comb. nov.*

Basionym: *Chodatia tetrallantoidea* Kol *Bulletin de la Société Botanique de Genève* 23: 280, 1934 (lectotype designated here: figure on page 278 in Kol 1934).

Homotypic synonym: *Stichococcus tetrallantoideus* (Kol) Hindak, 1996.

Heterotypic synonyms: *Stichococcus allas* Reisingl 1964; *Deuterostichococcus allas* (Reisingl) Pröschold & Darienko, 2020.

Many thanks to Dr R.L. Moe for helpful discussions.

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