

## Nomenclatural notes on some *Pleurotaenium* Nägeli (*Desmidiaceae*, *Zygnematophyceae*) infraspecific taxa

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Here we propose to update some of *Pleurotaenium minutum* (Ralfs) Hilse, *P. rectum* Delponte and *P. trabecula* Nägeli (*Desmidiaceae*, *Zygnematophyceae*) infraspecific taxon names that require revision in accordance with the ICN (Turland & al. 2018).

*Pleurotaenium minutum* (Ralfs) Hilse is a homotypic synonym of *Haploaenium minutum* (Ralfs) Bando (1988), and thus the transfer of the following three infraspecific taxa names are necessary. We consider that these taxa should be included within *H. minutum* to which they are morphologically related.

***Haploaenium minutum* f. *incurvum*** (Bourrelly & Couté) Levanets & Janse van Vuuren, *comb. nov.*

Basionym: *Pleurotaenium minutum* f. *incurvum* Bourrelly & Couté *Bibliotheca Phycologica* 86: 12, 184, pl. II: fig. 12. 1991 (as ‘*Pleurotaenium minutum* var. *minus* f. *incurva*’)

Type locality: Madagascar, lake near Isampeza, 15 km from Ambovombé, coll. R. Decary, 10 March 1932.

Registration: <http://phycobank.org/104850>

***Haploaenium minutum* f. *rotundatum*** (Willi Krieger) Levanets & Janse van Vuuren, *comb. nov.*

Basionym: *Pleurotaenium minutum* f. *rotundatum* Willi Krieger *Archiv für Hydrobiologie, Supplement* 11: 167, pl. VI, fig. 9, 1932 (as ‘*Pleurotaenium minutum* var. *crassum* West f. *rotundata* Willi Krieger’)

Type locality: Indonesia, North Sumatra, Toba-Heide near Huta Gindjang, ca. 1500 m., pool behind big pond, between *Bacopa*.

Registration: <http://phycobank.org/104851>

***Haploaenium minutum* var. *longissimum*** (A.M.Scott & Grönblad) Levanets & Janse van Vuuren, *comb. nov.*

Basionym: *Pleurotaenium minutum* var. *longissimum* A.M.Scott & Grönblad *Acta Societatis Scientiarum Fennicae, Nova Series B* 2(8): 11, pl. II [2]: figs 1, 2, 1957.

Type locality: USA, Florida, Bay County, 16 miles west of Panama City, lily pond, 6 September 1946.

Registration: <http://phycobank.org/104852>

*Pleurotaenium rectum* Delponte was transferred to the genus *Haploaenium* Bando as *Haploaenium rectum* (Delponte) Bando 1988, and thus the transfer of the following infraspecific taxa names is necessary. We consider that these forms should be included within *H. rectum* to which they are morphologically related.

***Haploaenium rectum* f. *granulatum*** (J.Dick) Levanets & Janse van Vuuren, *comb. nov.*

Basionym: *Pleurotaenium rectum* f. *granulatum* J.Dick *Kryptogamische Forschungen* 1(4): 240, no fig., 1919

Syntype localities: Germany, Southern Bayern: 1. Weilheimer Hardt near Hardtkapelle, 29 December 1912; – 2. Bernrieder Filz near Bernried, 30 March 1913; – 3. Jenhausen near Weilheim, felt (?) [in German - Filz] east of the town, 7 June 1914; – 4. Münzinger Filz near Wolfratshausen, 1 January 1916; – 5. Lake Kochel, on moss, 29 August 1916.

Registration: <http://phycobank.org/104866>

***Haplotaenium rectum* f. *punctatum*** (Raciborski) Levanets & Janse van Vuuren, *comb. nov.*

Basionym: *Pleurotaenium rectum* f. *punctata* Raciborski *Pamiętnik Akademii Umiejętności w Krakowie, Wydział Matematyczno-Przyrodniczy* 17: 107, pl. III, fig. 16, 1889.

Type locality: Poland, near Warsaw, between *Utricularia minor*.

Registration: <http://phycobank.org/104867>

We also propose to update one infraspecific name of *Pleutotaenium trabecula* Nägeli that requires revision in accordance with ICN Art. 11.4 (Turland & al. 2018).

***Pleurotaenium trabecula* f. *tirolense*** Levanets & Janse van Vuuren, *nom. nov.*

Replaced name: *Pleurotaenium trabecula* f. *minus* Hustedt ('*minor*') *Archiv für Hydrobiologie und Planktonkunde* 6: 324, no fig., 1911 (priority for *Pleurotaenium trabecula* f. *minus* Magnus & Wille ('*minor*') 1884: 32, pl. I, fig. 48).

Type locality: Austria, Tirol, Kitzbühel, Lake Schwarz.

Registration: <http://phycobank.org/104868>

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Krieger, W. (1932). Die Desmidiaceen der Deutschen limnologischen Sunda-Expedition. *Archiv für Hydrobiologie, Supplement* 11: 129–230, 26 pls.

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