

**Validation of desmid names (*Desmidiiales*, *Zygnematophyceae*) described by G.A. Prowse from Malaysia and Singapore**

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In 1969, Gerald Albert Prowse (1916–1977) published an article on the desmids of the Malay Peninsula in *The Gardens' Bulletin Singapore* in which nine new desmid taxa were described. Some were later recorded from south-east Asia and Australia. Unfortunately, many are not nomenclaturally valid as types were not indicated in accordance with Art. 40.1 of ICN (Turland & al. 2018). We have not been able to locate original material from Prowse's collections: none has been found at SING, and [Index Herbariorum](#) does not list any holdings in other herbaria.

Here we examine the validity of Prowse's names and, where necessary, validate them by designating types from illustrations provided by Prowse (1969), in accordance with ICN Art. 40.5. When cited as a locality "Malay Peninsula" herein includes the Republic of Singapore.

***Pleurotaenium burmense* var. *elegans*** Prowse ex Levanets & Guiry, *var. nov.*

Replaced designation: "*Pleurotaenium burmense* var. *elegans* Prowse" (Prowse 1969: 337).

Description: Prowse (1969: 337, 340).

Holotype: Prowse (1969: 338, fig. 1 a, line drawing of a cell from the Malay Peninsula).

Type locality: Malay Peninsula.

Note: This variety was first noted from the Malacca River, Malaysia, but the author mentions further samples from Tasek Bera, Pahang, Malaysia, a forest swamp lake about 50 miles from the Malacca River. The name is invalid as it was clearly not based on a single gathering (Art. 8.3).

***Pleurotaenium spinosissimum*** Prowse

Description: Prowse (1969: 340).

Holotype: Prowse (1969: 338, fig. 1 b, line drawing of a single cell).

Type locality: Malay Peninsula: Malacca River 1956.

Note: Prowse (1969: 340) in his protologue mentions that "Only one specimen was found in a net haul taken during the flooding of the Malacca River in 1956, but it was so distinctive that it was immediately drawn with the aid of the *camera lucida*." He goes on to mention other samples so that the protologue encompasses several elements but fig. 1 b is specifically mentioned as being from a single gathering and is of a single specimen and Prowse's name is thus valid.

***Triploceras splendens*** Prowse ex Levanets & Guiry, *sp. nov.*

Replaced designation: "*Triploceras splendens* Prowse" *nom. inval.* (Prowse 1969: 340).

Description: Prowse (1969: 340-341).

Holotype: Prowse (1969: 338, fig. 1(c), line drawing of a single cell from a single gathering).

Type locality: Malay Peninsula: Tasek Bera.

Note: Prowse (1969: 341) specifies "forest swamp lake Tasek Bera and nowhere else" but does not specifically refer to a single gathering and thus the intended name is invalid.

***Micrasterias alata* f. *tumida*** Prowse ex Levanets & Guiry, *forma nov.*

Replaced designation: "*Micrasterias alata* f. *tumida* Prowse" *nom. inval.* (Prowse 1969: 341).

Description: Prowse (1969: 341).

Holotype: Prowse (1969: 339, fig. 1(d), line drawing of a cell from a single gathering).

Type locality: Malay Peninsula: Tasek Bera, Malaysia.

Note: Prowse (1969: 341) again refers to Tasek Bera but does not specify a single sample and thus the intended name is invalid.

***Micrasterias foliacea* var. *spinosa*** Prowse ex Levanets & Guiry, *var. nov.*

Replaced designation: “*Micrasterias foliacea* var. *spinosa* Prowse” *nom. inval.* (Prowse 1969: 341).

Description: Prowse (1969: 341, 344).

Holotype: Prowse (1969: 342, fig. 2(a), line drawing of a cell from a single gathering).

Type locality: Malay Peninsula: Tasek Bera, Malaysia.

Note: Prowse (1969: 341) again refers to Tasek Bera but does not specify a single sample and thus the intended name is invalid.

***Micrasterias americana* var. *macrodon*** Prowse

Description: Prowse (1969: 344).

Holotype: Prowse (1969: 339, fig. 1(e), line drawing of a single cell).

Type locality: Malay Peninsula: Malaysia: Malacca River 1956.

Note: Prowse (1969: 341) refers to a single gathering of two specimens from the Malacca River and directly refers to a line drawing of a single cell from a single gathering which serves to validate the designation.

***Xanthidium superbum* var. *centricorne*** Prowse ex Levanets & Guiry, *var. nov.*

Replaced designation: “*Xanthidium superbum* var. *centricornis* Prowse” *nom. inval.* (Prowse 1969: 344).

Description: Prowse (1969: 344).

Holotype: Prowse (1969: 342, fig. 2 b, line drawings of a cell from a single gathering).

Type locality: Malay Peninsula: Tasek Bera, Malaysia.

Note: Prowse (1969: 344) refers to a single gathering of two specimens from the Malacca River and refers to a line drawing of two cells from this gathering. We have chosen one of these to validate the intended name.

***Phymatodocis nordstedtiana* var. *triangularis*** Prowse ex Levanets & Guiry, *var. nov.*

Replaced designation: “*Phymatodocis nordstedtiana* var. *triangularis* Prowse” *nom. inval.* (Prowse 1969: 345).

Description: Prowse (1969: 345).

Holotype: Prowse (1969: 343, fig. 2 g line drawings of a cell from a single gathering).

Type locality: Malay Peninsula.

Note: Prowse (1969: 345) refers to several localities on the Malay Peninsula (“Singapore, Sungai Besi Selangor, Malacca”) without indicating from which locality the illustration was taken and the intended name is thus invalid.

***Streptonema quadrangulare*** Prowse ex Levanets & Guiry, *sp. nov.*

Replaced designation: “*Streptonema quadrangulare* Prowse” *nom. inval.* (Prowse 1969: 345).

Description: Prowse (1969: 345).

Holotype: Prowse (1969: 343, fig. 2 d, line drawing of a cell from a single gathering).

Type locality: Malay Peninsula.

Note: Prowse (1969: 345) refers to several localities on the Malay Peninsula (“Malacca, Negri Sembilan, Singapore, Johore”) without indicating from which locality the illustration was taken and the same is thus invalid.



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Prowse, G.A. (1969). Some new desmid taxa from Malaya and Singapore. *Gardens' Bulletin Singapore* 24: 337–346, 2 figs, 7 pls.

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