

Nomenclatural notes on *Nitella* (Characeae, Charophyceae) from Australia

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During research on the Tribe *Nitelleae* (Characeae, Charophyceae) of the Northern Territory of Australia (Casanova & Karol, 2023), some nomenclatural issues became apparent.

Nitella gelatinosa A.Braun (1849: 198) was proposed as a new combination for *Chara gelatinosa* A.Braun (1843: 115), an illegitimate later homonym of *Chara gelatinosa* (Linnaeus) Roth (Roth 1797: 125), (= *Conferva gelatinosa* Linnaeus, = *Batrachospermum gelatinosum* (Linnaeus) De Candolle). This name was replaced with *Nitella gelatinifera* R.D.Wood (in Wood & Imahori 1965: 774); however, in accordance with ICN Art. 51.8 (Turland & al. 2018), *Nitella gelatinosa* A.Braun is a valid and legitimate name dating from 1849. The name *Nitella gelatinosa* A.Braun also appeared in Kützing's (1849: 513) *Species algarum* (23–24 July 1849). We have not been able to establish a firm date of publication for Vol. 1 of *Hooker's Journal of Botany & Kew Garden Miscellany*. *Nitella gelatinifera* R.D.Wood is an illegitimate later synonym. Oospore characters of the holotype (MEL) of *Chara gelatinosa* A.Braun are shown in Fig. 1A, B.

Nitella microphylla A.Braun (1849: 196) is an illegitimate later homonym of *Nitella microphylla* (Balbis & Nocca) Kützing (in Reichenbach 1832: 843) (= *Caulinia microphylla* Nocca & Balbis 1821: 163, pl. 16, 'mycrophylla') and requires replacement:

***Nitella swanensis* nom. nov.**

Replaced name: *Nitella microphylla* A.Braun *Hooker's Journal of Botany & Kew Garden Miscellany* Vol. 1: 196, 1849, nom. illeg., non *Nitella microphylla* (Nocca & Balbis) Kützing, 1832.

Type locality: "Swan River, [James] Drummond" [Swan River, Perth, Western Australia].

Type: **BM ex K** (Drummond, No. 9, in herb. Hooker; **BM** 000767154; Fig. 2A, B).

Phycobank Registration: 103943.

Note: James Drummond (1786?–1863), collector of the original material of *Nitella microphylla* A.Braun, was a Scot who established botanic gardens in Cork, Ireland in 1808 for the Royal Cork Institution (1803–1885); the gardens are now Saint Joseph's Cemetery. In 1828, after funding issues, Drummond emigrated to the Swan River Colony and collected extensively for various botanists, including the Hookers of Kew.

The identity of *Caulinia microphylla* Nocca & Balbis remains to be established: the plant illustrated in pl. 16 (XVI) is a *Chara*.

Braun, A. (1843). Charae Preissianae adiectis reliquis speciebus e Nova Hollandia hucusque cognitae. *Linnaea* 17: 113–119.

Braun, A. (1849). Charae australes antarcticae, or characters and observations on the Characeae of Australia and the southern circumpolar regions. *Hooker's Journal of Botany & Kew Garden Miscellany* 1: 193–203.

Casanova, M.T. & Karol, K.G. (2023). Charophytes of Australia's Northern Territory – II. Tribe

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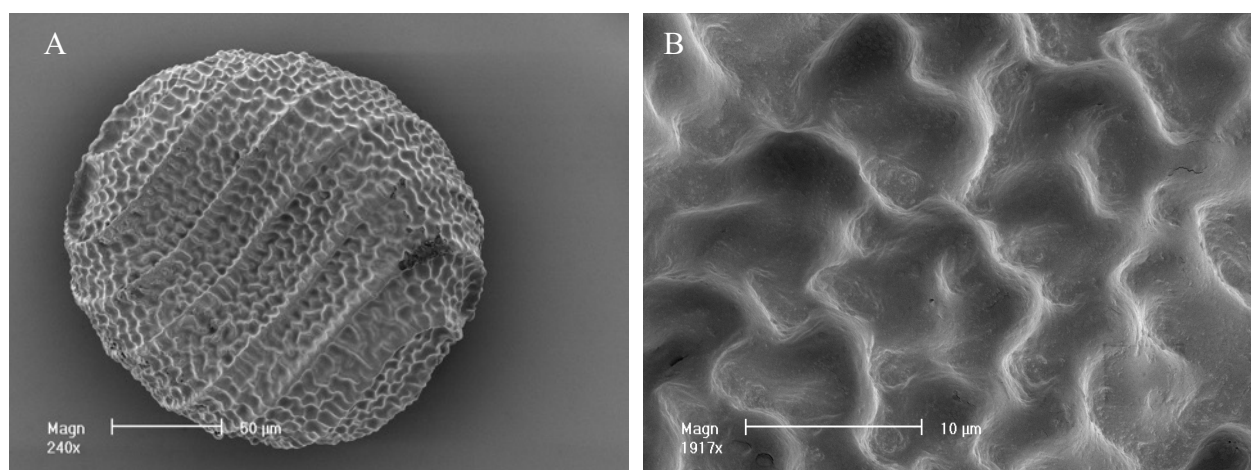


Fig. 1. Scanning electron micrographs of oospores of *Chara gelatinosa* A.Braun, *nom. illeg.* [= *Nitella gelatinosa* A.Braun] from specimen *In locis hieme innundatis ad fluvium* “Canning River” [Perth, Western Australia], Nov. 1841, *L. Preiss sine numero* (MEL, holotype). Fig. 1A. Oospore in side view, scale: 50 μ m. Fig. 1B. Detail of oospore wall ornamentation, scale: 10 μ m.

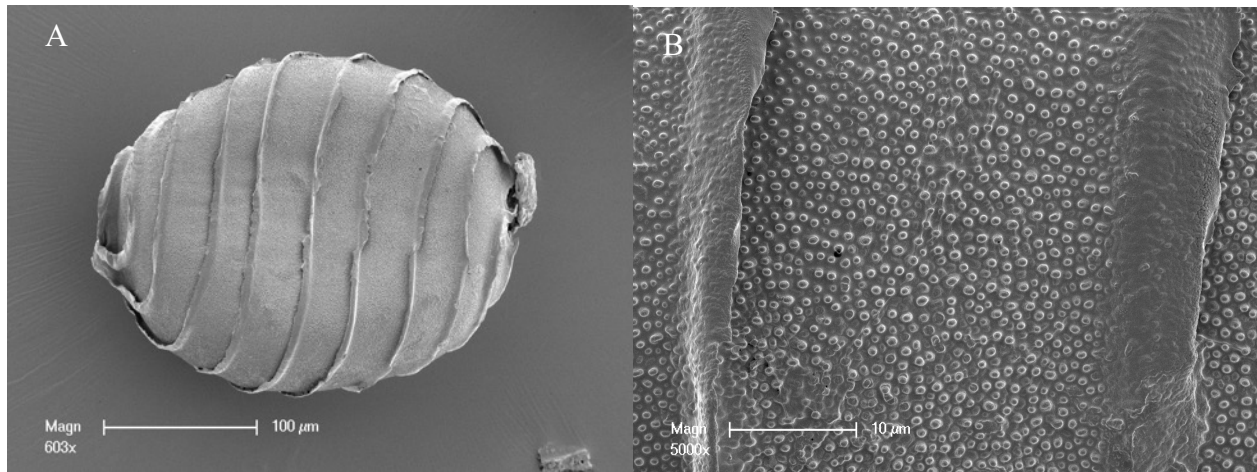


Fig. 2. Scanning electron micrographs of oospores of *Nitella microphylla* A.Braun, *nom. illeg.* [= *Nitella swanense* *nom. nov.*] from specimen Swan River, ?1845, *J. Drummond* 9 (**BM** 000757154, holotype). Fig. 2A. Oospore in side view, scale: 100 µm. Fig. 2B. Detail of oospore wall ornamentation, scale: 10 µm.