



***Flintia*, gen. nov. a replacement genus name for the invalid genus name *Parallela* E.A.Flint (Microsporaceae, Chlorophyceae)**

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Article 20.2 of the ICN (Shenzhen Code; Turland & al. 2018) specifies that “The name of a genus may not coincide with a Latin technical term in use in morphology at the time of publication unless it was published before 1 January 1912 and was accompanied by a species name published in accordance with the binary system of Linnaeus.”

Whilst preparing a phycological database for his work in environmental evaluation, one of us (EAMN) came across the designation “*Parallela*” E.A.Flint, a genus introduced for green algae forming macroscopic ribbons or planar agglomerations covered with a mucilaginous sheath (Flint 1974, Novis & al. 2010, Štenclová & Fučíková 2019).

The Latin adjective “*parallellus*, -a, -um” has been used extensively as a specific and infraspecific epithet for algal names and in Latin and English descriptions to express particular alignments of morphological features, and thus the designation “*Parallela*” is invalid under the current rules. We here replace it with a new genus name and make the necessary new combinations for other species currently included in the genus.

***Flintia* Molinari & Guiry, gen. nov.**

Replaced genus designation: “*Parallela* E.A.Flint” *nom. inval.* *New Zealand Journal of Botany* 12: 358, 1974.

Type: *Flintia novae-zelandiae* Molinari & Guiry, *sp. nov.* (below).

Description: Pseudofilamentous or palmelloid algae with uninucleate oval cells, 5–11 µm long, 3–7 µm wide. Chloroplast parietal, bell-shaped, pyrenoid absent. The colonial thalli are ribbon-like, with uniseriate or biseriate chains of cells or *Crucigenia*-like planar coenobia, covered with an elastic, resistant sheath of colourless, homogeneous mucilage.

Etymology: The new genus name honours [Elizabeth Alice Flint](#) (“Betty”, 1909–2011), New Zealand botanist who specialised in freshwater algae, particularly desmids, collaborating with Hannah Croasdale and Marilyn Racine on the remarkable three-volume series *Flora of New Zealand Desmids*. Betty published her last journal publication (on *Parallela*) at the incredible age of 101 (Novis & al. 2010) and died the following year.

Note: *Flintia* R.J.Schubert, 1911 is a genus name for fossil foraminifera (*Spiroloculinidae*); *Flintia* R.J.Schubert is currently regarded as a synonym of *Spiroloculina* d'Orbigny, 1826. Foraminifera are not subject to the ICN, so the possibility of confusion does not arise.

***Flintia novae-zelandiae* Molinari & Guiry, sp. nov.**

Replaced designation: “*Parallela novae-zelandiae* E.A.Flint”, *nom. inval.* *New Zealand Journal of Botany* 12: 358, figs 1–3, 1974.

Description: Ribbon-like, one-layered thallus, initially uniseriate at the point of attachment, and becoming biseriate after 6–8 cells, due to the production of gel that spreads apart the cells, and the general appearance becomes clavate. Oval, uninucleate cells 7–9 µm long, 3–4.5 µm wide, with thin walls, chloroplast parietal, bell-shaped, pyrenoid absent. Gelatinous sheath 2 µm wide at the edges. Zoospores pyriform, with slightly unequal apical flagella.

Type: New Zealand: Christchurch: Belfast: tributary of Styx River; 12 March 1963, *Flint s. n.* (CHR 234271).

Note: There is considerable variation in the rendering of epithets derived from the placename “New Zealand” (Gardner 1998, Webb & Edgar 1999). The original spelling is to be retained as “*novae-zelandiae*”; Art. 60.11 does not permit removal of the hyphen as the “epithet is formed of words that usually stand independently,...”, and the epithet has the correct adjectival form (Art. 60.1; Webb & Edgar 1999).

Other species of the genus:

Flintia speciosa (Korshikov) Molinari & Guiry, *comb. nov.*

Basionym: *Dispora speciosa* Korshikov, *Vyznachnyk prsnovodnykh vodorostey Ukrayins'koyi RSR* 5: 334, fig. 308, 1953.

Homotypic synonym: *Parallela speciosa* (Korshikov) Štenklová & Fučíková (Štenklová & Fučíková, 2019: 69)

Type: as Korshikov’s types have not been found to date (Kapustin, pers. comm.), we here designate as lectotype fig. 308 in Korshikov (1953).

Note: References to this species being described from the Ukraine, probably because it was described in Ukrainian, are incorrect. The type locality cited by Korshikov (1953: 334) is “В УРСР невідома. Північ Європейської частини СРСР” [In the Ukrainian Soviet Socialist Republic it is unknown. North of the European part of the USSR].” The intended epitype for this name was collected in Portugal (Štenklová & Fučíková 2019); however, their designation is invalid as the type it epitypifies is not “explicitly cited” as required by Art. 9.9. Further studies of Russian material and the designation of a Russian epitype for our lectotype are necessary.

Flintia transversalis (Brébisson) Molinari & Guiry, *comb. nov.*

Basionym: *Hormospora transversalis* Brébisson, *Annales des Sciences Naturelles, Botanique, série 3* 1: 28, pl. 1: figs 2a, 2b, 1844.

Type locality: “In stagnis paludosis, inter Equiseta et Typhas, prope Falaise; reperta semel, autumnno 1843” [In swampy ponds, between *Equisetum* and *Typha*, near Falaise [Normandy, France]; found once, in autumn 1843].

Type: As Brébisson’s material was clearly stated to be from a single gathering, the material studied by Christensen (1962) at CN is the holotype.

Homotypic synonyms: *Parallela transversalis* (Brébisson) Novis, M.Lorenz, Broady & E.A.Flint, *Phycologia* 49(4): 382, 2010. *Radiofilum transversale* (Brébisson) T.A. Christensen, *Flora (Jena)* 152: 76, 1962. *Radiofilum transversale* (Brébisson) Ramanathan, *Indian Council on Agricultural Research, Monographs on Algae* 6: 75, 1964.

Heterotypic synonyms: *Ulothrix irregularis* Wille, *Forhandlinger i Videnskabs-Selskabet i Kristiania* 1880(11): 63, 1881. *Radiofilum irregulare* (Wille) Brunthaler, *Österreichische Botanische Zeitschrift* 63: 7, 1913.

We are grateful to Dr D. Kapustin for helpful discussions.

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