Corrections to the bryophyte names *Porella cranfordi* and *Temnoma townrowii*, and a note on *Pyrrhobryum paramattense*

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**Abstract**

Orthographic errors in the specific epithets of *Porella cranfordi* Steph. and *Temnoma townrowii* R.M.Schust. are corrected. The orthography of the specific epithet of *Pyrrhobryum paramattense* (Müll.Hal.) Manuel is discussed, and the original spelling is retained. The collector of the type of *Pyrrhobryum paramattense* was most likely Franz Wilhelm Sieber, not Charles von Hügel.

**Introduction**

Article 60.1 of *The International Code of Nomenclature for Algae, Fungi and Plants (Shenzhen Code)* (Turland *et al.* 2018), referred to hereafter as the *Code*, states that 'The original spelling of a name or epithet is to be retained, except for the retention of typographical or orthographical errors...' (with some provisos unrelated to the taxa considered in this paper). That provision is relevant to three long-standing names in Australasian bryology: *Porella cranfordii* Steph. (Marchantiophyta: Porellaceae), *Temnoma townrowii* R.M.Schust. (Marchantiophyta: Pseudolepicoleaceae), and *Pyrrhobryum paramattense* (Müll.Hal.) Manuel (Bryophyta: Rhizogoniaceae).

*Porella crawfordii* Steph. nom. corr. ('cranfordii'), Hedwigia 28: 270 (1889)

In her treatment of *Porella* for Australasia and the South Pacific, So (2002) recognised that the epithet *cranfordii* should be amended to *cranfordi*, which is the male substantive epithet formed from Cranford, the supposed surname of the person honoured by the epithet. This is in accordance with Article 60.8(b) of the *Code*. However, the collector mentioned by Stephani (1889: 270) in the protologue — 'New England, Moona near Walcha, A. R. Cranford 1884' — was Alexander Robert Crawford (1840–1912), owner of Moona Plains property in northeastern New South Wales (Maiden 1903: 79, Anonymous 1912, Hall 1978). The error probably arose from a misreading of the handwritten name, a script *w* being easily mistaken for a script *n*. It is noteworthy that an isolecotype in MEL (MEL-1038134!) has the collector's name clearly stated as 'A. R. Crawford'; and is in fact stored (as are almost all collections of this species in Australian herbaria) as *Porella crawfordii* Steph., even though the corrected name has not been published. As a result, this name appears in many publications and websites (e.g. Meagher and Fuhrer 2003, Downing *et al.* 2007, JSTOR 2020).
Under the Code, orthographic errors should be corrected, but the liberty of changing names should also be applied with reserve (Article 60.3). Article 60.9, which relates to intentional latinisation of names, does not apply, and Article 60.4 notes that the letter w, foreign to classical Latin, is permissible in scientific names. Thus, Porella cranfordi should be corrected to Porella crawfordii.

**Temnoma townrowiorum** R.M.Schust. nom. corr. (‘townrowii’), Candollea 21: 351 (1966)

Schuster (1966: 351) named Temnoma townrowii ‘in honor of Dr. and Mrs. John Townrow, of Hobart, Tasmania.’ Article 60.8 of the Code states that terminations of specific epithets that are contrary to the standards set out in the Article are treated as errors to be corrected. In this case the required termination of the specific epithet, as defined by Article 60.8(b), is −iorum because the name honours more than one person, as in Examples 24 and 25 under Article 60.8. Temnoma townrowii should be corrected to the less elegant Temnoma townrowiorum, following Art. 60.8(b).

**Pyrrophyrum paramattense** (Müll.Hal.) Manuel

Müller (1851: 555) described Pyrrhobryum paramattense (as Mnium paramattense) from a specimen in the herbarium of Gustav Kunze. The type statement reads ‘ Nova Hollandia, cum Hymenophyllaceis et Dicrano Sieberiano commixtum, in collibus “Paramatta-Hügel” nuncupatis. Hb. Kunzeanum.’ In the same volume, Müller (1851: 114) gave a locality for another species as ‘ Nova Hollandia prope Paramatta et Port Jackson, in arborum cortice.’ Thus Müller accepted the spelling of the locality as Paramatta, presumably because that is how Kunze had spelt it.

The township of Parramatta was founded in 1788 as Rose Hill, and renamed Parramatta by Governor Arthur Phillip in 1791 (Higginbotham 1985, Parramatta Heritage Centre 2020). Collins (1798) noted that the name was derived from the Dharug phrase for the area, par-ra-mat-ta, which has been interpreted to mean ‘place of eels’ (McCarthy 1963, Appleton and Appleton 1992). After the declaration of the township, the official spelling, Parramatta, was usually used (e.g. Collins 1798, Chapman 1803, Slater 1819, Bemi 1828), but the spelling Paramatta was also common (e.g. Barrington 1802, Bennet 1834, Marsden 1858).

In modern times it has been common for the specific epithet of Pyrrhobryum paramattense to be spelt paramattense, especially in Australian publications (e.g. Scott and Stone 1976, Ramsay 1984, Dalton et al. 1991, Pharo and Beattie 2002, Meagher and Fuhrer 2003).

Article 60.1 of The Code includes examples of orthographic errors that should be corrected, but none applies directly to this instance. In fact paramattense echoes the adjectival epithet commemorating Pennsylvania, which appears in botany and zoology in epithets spelled with one or two n’s (e.g. Carex pensylvanica Lam., Vespula pensylvanica Saussure, Fraxinus pennsylvanica Marshall). I am therefore persuaded that it does not require correction, and might be considered an interesting quirk of botanical nomenclature.

The collector of the type is unknown. Gilmore (2012) attributed the collection to ‘Huegel’, i.e. Charles von Hügel, who visited Port Jackson in 1834, but there is only a single known plant collection made by him while he was there (a sundew, Drosera peltata Thunb. subsp. peltata). In fact, Hügel (English ‘hill’) in the protologue is not the collector but part of the locality description, ‘in collibus “Paramatta-Hügel” nuncapatis’ — in the hills called “Paramatta Hills”. A likely collector is Franz Wilhelm Sieber, who collected in the Sydney region from June to December 1823 and is known to have collected bryophytes and ferns there; Kunze named the fern Cheilanthes sieberi after him. ‘Hymenophyllum’ and ‘Dicrano sieberanum’ mentioned in the protologue also point to Sieber. He collected the type material of Dicranum sieberianum Hornsch. in the region, as well as Hymenophyllum cupressiforme (AVH 2020). Furthermore, Sieber is mentioned by Müller (1851: 247, 392) as the collector of two other Australian bryophytes.

Unfortunately almost all of Müller’s bryophyte types were lost in the bombing of Berlin on 2 March 1943, and Kunze’s herbarium at the University of Leipzig was destroyed in December 1943 when the Botany Department was hit by a bomb (Morton 1959). There are no known isotypes of Pyrrhobryum paramattense. Four collections held in the British Museum (BM) are listed as possible types, but all are from Ernst Hampé’s herbarium, rather than Kunze’s: BM 000668768 was collected by Ferdinand von Mueller from Moe Swamp in Victoria; BM 000668769 was collected by von Mueller from Mt Juliet, not far from Melbourne; BM 000668700 is from ‘Australia felix’, i.e. Victoria; and BM 000668772 is annotated merely ‘Nova Holland’ and was originally identified as P. spiniforme Hedw. If no original material can be located, a neotype should be designated.
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References

Anonymous (1912) Noted Botanist Dead. *The Maitland Daily Mercury*. Wednesday 10 April 1912 (page 4).
Appleton R, Appleton B (1992) *The Cambridge dictionary of Australian places*. Cambridge University Press: South Melbourne, Australia. https://doi.org/10.1017/CBO9781139084970
AVH (2020) The Australasian Virtual Herbarium [http://avh.ala.org.au], accessed 30 June 2020.
Barrington G (1802). *The history of New South Wales, including Botany Bay, Port Jackson, Parramatta, Sydney, and all its dependencies* (etc.). M. Jones: London, UK. https://doi.org/10.5962/bhl.title.25475
Bemi PL (1828) *Saint John in the Hundred of Parramatta, County of Cumberland*. P.L. Bemi: Sydney, Australia.
Bennet G (1834) *Wanderings in New South Wales, Batavia, Pedir Coast, Singapore and China: being the journal of a naturalist in those countries during 1832, 1833, and 1834*. Richard Bentley: London, UK. https://doi.org/10.5962/bhl.title.96943
Chapman WN (1803) ‘General Orders’. *The Sydney Gazette and New South Wales Advertiser*, Saturday 5 March 1803, page 2.
Collins D (1798) *An account of the English colony of New South Wales*. Volume 1. T. Cadell & W. Davies: London, UK.
Dalton PJ, Seppelt RD, Buchanan AM (1991) An annotated checklist of Tasmanian mosses. In: Banks MR, Smith SJ, Orchard AE, Kantvilas G (eds), *Aspects of Tasmanian Botany — A tribute to Winifred Curtis*. Royal Society of Tasmania: Hobart, Australia, pages 15–32. https://doi.org/10.26749/rstpp.124.2.15
Downing AJ, Brown EA, Oldfied RJ, Selkirk PM, Coveny R (2007) Bryophytes and their distribution in the Blue Mountains region of New South Wales. *Cunninghamia* 10: 225–254.
Gilmour SR (2012) Australian Mosses Online. 36. Rhizogoniaceae: *Pyrrhobryum*. (http://www.anbg.gov.au/abrs/Mosses_Online/Rhizogoniaceae_Pyrrhobryum.pdf) (Accessed 30 June 2020).
Hall N (1978) *Botanists of the eucalypts*. CSIRO: Melbourne, Australia.
Higginbotham E (1985) *The early settlement of Parramatta, 1788 to c. 1830, and the proposed archaeological excavation of the site of the Family Law Courts and Commonwealth Government Office Block at Parramatta, N.S.W.* New South Wales Department of Housing & Construction: Sydney, Australia.
JSTOR (2020) JSTOR Global Plants website: Type of *Porella crawfordii* Steph. (https://plants.jstor.org/stable/10.5555/al.ap.specimen.mel1038134) (Accessed 30 June 2020).
Maiden JH (1903) *The forest flora of New South Wales*. NSW Government Printer: Sydney, Australia. https://doi.org/10.5962/bhl.title.140187
Marsden JB (1858) *Memoirs of the life and labours of the Rev. Samuel Marsden of Paramatta, Senior Chaplain of New South Wales, and of his early connexion with the missions to New Zealand and Tahiti*. Religious Tract Society: London, UK.
McCarthy FD (comp.) (1963) *New South Wales Aboriginal place names and euphonious words, with their meanings*. 4th edition. NSW Government Printer: Sydney, Australia.
Meagher D, Fuhrer B (2003) *A field guide to the mosses and allied plants of southern Australia*. ABRS & FNCV: Canberra & Melbourne, Australia.
Morton CV (1959) The fern collections in some European herbaria, II. *American Fern Journal* 59: 11–22.
Müller C (1851) *Synopsis muscorum frondosorum omnium hucusque cognitorum*. Part 2. Albert Foerstner: Berlin, Germany.
Parramatta Heritage Centre (2020) Parramatta timeline 1788 – Present. (http://arc.parracity.nsw.gov.au/blog/2015/05/26/parramatta-timeline-1788-present/) (Accessed 15 April 2020).
Pharo E, Beattie A (2002) The association between substrate variability and bryophyte and lichen diversity in eastern Australian forests. *The Bryologist* 105: 11–26. https://doi.org/10.1639/0007-2745(2002)105[0011:TA BSV A]2.0.CO;2
Ramsay H (1984) The mosses of Lord Howe Island. *Telopea* 2: 549–558. https://doi.org/10.7751/telopea19844503
Schuster RM (1966) A memoir of the family Blepharostomaceae. *Candollea* 21: 241–355.
Scott GAM & Stone IG (1976) *The mosses of southern Australia*. Academic Press: London, UK.
Slater J (1819) *A description of Sydney, Parramatta, Newcastle, &c. settlements in New South Wales, with some accounts of the manners and employment of the convicts*. Catharine Slater: Nottingham, UK.
So ML (2002) The genus *Porella* (Porellaceae, Hepaticae) in Australasia and the South Pacific. *Systematic Botany* 27: 4–13.

Turland NJ, Wiersema JH, Barrie FR, Greuter W, Hawksworth DL, Herendeen PS, Knapp S, Kusber W-H, Li D-Z, Marhold K, May TW, McNeill J, Monro AM, Prado J, Price MJ, Smith GF (eds) (2018) *International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code) adopted by the Nineteenth International Botanical Congress Shenzhen, China, July 2017*. Regnum Vegetabile 159. Koeltz Botanical Books: Glashütten, Germany. https://doi.org/10.12705/Code.2018

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