

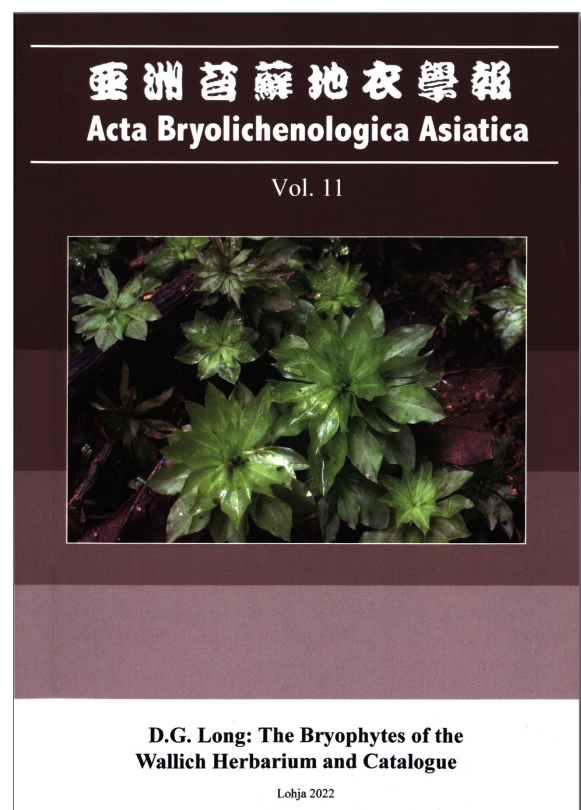
BOOK REVIEW

Long, D. G. 2022. The bryophytes of the Wallich herbarium and catalogue. *Acta Bryolichenologica Asiatica*. Vol. 11, 104 pp., with 6 figures in colour. Paperback, size 25.0 × 17.6 cm. Effectively published on 1 June 2022. Finnish-Chinese Botanical Foundation, Lohja, Finland. ISBN: 978-952-67464-8-7. Price: 50 € + shipping. Available from Finnish-Chinese Botanical Foundation, Mailantie 109, FI-08800 Lohja, Finland, timkop@dnainterner.net

Ryszard Ochyra*

Bryological research on the Indian subcontinent has a long tradition, dating back to the 1780s, although in Indian bryophyte literature (e.g., Gangulee 1969; Chopra 1975; Dabhade 1998; Nair et al. 2005; Aziz & Vohra 2008; Chaudhary et al. 2008; Daniels & Daniel 2013; Sandhya Rani et al. 2014) Scottish physician Francis Buchanan Hamilton (1762–1829) is considered a pioneer collector of mosses in this region. In the years 1802–1803 he collected some mosses in Nepal before he became the Superintendent of the Shibpur East India Company Botanical Garden. His collection was examined by W. J. Hooker (1808), who recorded 17 species from Nepal, including ten new to science. They were published in his well known paper *Musci nepalenses*, which is considered by the above-mentioned Indian bryologists to be the first bryological publication from the Indian subcontinent.

Unfortunately, this is not entirely correct, because in fact the first data on mosses from India was published two decades earlier by Willdenow (1788). His work contains a description and illustrations of the new species *Trichostomum indicum*, which was collected by Johan Peter Rottler (1749–1836), Lutheran missionary and botanist at Danish Tranquebar Mission on the Coromandel Coast of Tamil Nadu in South India. He arrived there in 1776 and was in contact with various professors in Europe, including J. Ch. Schreber in Erlangen, C. L. Willdenow in Berlin and M. H. Vahl in Copenhagen and donated to them some botanical collections. As a pre-starting point species name, *T. indicum* has a chequered taxonomic and nomenclatural history but correctly the species bearing this name belongs within the genus *Hydrogonium* (Müll. Hal.) A. Jaeger as *Hydrogonium indicum* (Brid. ex Anon.) Ochyra & Plášek, *comb. nov.* (Basionym: *Trichostomum indicum* Brid. ex Anon., J. Bot. (Schrader) 1801(1[1]):



196. Apr 1803). It is worth noting that the original specimen of this species collected by Rottler was described and illustrated once more as a new species, *Trichostomum orientale* F. Weber (Weber 1804) and the conspecificity of this species and *T. indicum* is evident even when their illustrations in the original publications are compared.

One of the most outstanding and prolific plant collectors in the Indian area in the first decades of the nineteenth century was Nathaniel Wallich (1786–1854). He was the superintendent of the Indian Botanic Garden in Calcutta in 1817–1846 and amassed a huge herbarium

W. Szafer Institute of Botany, Polish Academy of Sciences, Lubicz 46, 31-512 Kraków, Poland

* Corresponding author e-mail: r.ochyra@botany.pl

collection which formed the core of the “Herbarium of the East India Company”, which is now housed at Kew (K-W). This collection is accompanied by a catalogue of all species, which Wallich himself compiled in the years 1828–1849 and successively published as the lithographed “Numerical list”. It includes over 8,500 species, some of which consist of many gatherings from different areas. This herbarium contains 143 numbered collections of bryophytes, the list of which was published in 1832. This is one of the most important early collection of Indian bryophytes, including many type specimens of new species which were described by W. J. Hooker, Th. Taylor, Ch. Schwägrichen, R. K. Greville, J. G. C. Lehmann and J. B. G. Lindenberg, W. H. Harvey and W. Mitten. Apart from this basic collection, Wallich distributed very many duplicates of his specimens to different contemporary authorities and nowadays they are housed, among others, in BM, E, G and TCD. It is worth noting that on the basis of his specimen collected in Nepal the well known pantropical moss species *Bucklandiella subsecunda* (Hook. & Grev. ex Harv.) Bedn.-Ochyra & Ochyra was described.

The author of the present work undertook a truly Herculean work of taxonomic and nomenclatural analysis of the entire bryophyte collection in the Wallich Herbarium. In the introductory part, the history of the Wallich’s collection is presented, with particular emphasis on bryophytes, the adopted rules for typification of names are described, with special attention to the categories of nomenclatural types, and the most significant bryophyte finds in the Wallich Herbarium are listed, including new species and genera as well as new floristic records. The core of the treatment contains the lists of bryophyte taxa in the Wallich Catalogue and corresponding specimens in K-W and other herbaria. Each taxon is developed according to the adopted scheme, which includes, inter alia, currently accepted name, data from the Wallich Catalogue entries, data on specimens deposited in K-W, nomenclatural status, and usually extensive commentaries.

The treatment ends with two appendices. The first one is short and consists of three names only, which are new combinations validly published in the Wallich Catalogue. On the other hand, Appendix 2 is very extensive and contains an alphabetical list of 33 taxa whose names are typified and they are often accompanied by extensive taxonomic notes. Interestingly, in Appendix 2 the author accepted the term “Type citation” for the data regarding the original material cited in the protologues and used for the description of new taxa. However, in the enumeration of bryophyte taxa in the Wallich Catalogue it is replaced by “Citation in validating description”.

This phrase, and the even more commonly used term “Protologue” in this context, is very misleading because it is not only long, but also does not clearly indicate what is cited from the true protologue and one has to guess that it is about quoting a type.

The present study has been prepared with exceptional and meticulous care and the author’s exemplary approach to the typification of names deserves special emphasis. Unfortunately, this is often the Achilles’ heel of many taxonomic bryological works, often published in journals which have special nomenclature experts in editorial boards. The author correctly interprets the principles of the *International Code of Nomenclature* and in this respect, it is an exemplary work which should serve as a model for any similar studies. It is a valuable taxonomic and nomenclatural contribution to Asian bryology which should encourage researchers working in other regions of the world to prepare similar enumerations of new moss taxa described from the areas concerned.

References

- Aziz, M. N. & Vohra, J. N. 2008. Pottiaceae (*Musci*) of India. Bishen Singh Mahendra Pal Singh, Dehra Dun, [5] + 366 pp.
- Chaudhary, B. L., Sharma, T. P. & Bhagora, F. S. 2008. *Bryophyte flora of North Konkan, Maharashtra (India)*. Himanshu Publications, Udaipur – New Delhi, [8] + 326 pp. + 16 pp. with colour plates.
- Chopra, R. S. 1975. *Taxonomy of Indian mosses (An introduction)*. [Botanical Monograph. No. 10]. Publications & Information Directorate (CSIR), New Delhi, India, xl + 631 pp.
- Dabhade, G. T. 1998. *Mosses of Khandala & Mahabaleshwar in the Western Ghats (India)*. Mr. A. S. Dalvi, Kharigaon, iv + 194 + [5, errata] pp.
- Daniels, A. E. D. & Daniel, P. 2013. *The bryoflora of the southernmost Western Ghats, India*. Bishen Singh Mahendra Pal Singh, Dehra Dun, [7] + 352 pp.
- Gangulee, H. C. 1969. *Mosses of Eastern India and adjacent regions – a monograph*. Volume 1, Fascicle 1, pp. i–iv + 1–170. Privately published, Calcutta.
- Hooker, W. J. 1808. Musci nepalenses; or descriptions of several new mosses from Nepal. *Transactions of the Linnean Society of London* 9: 307–322.
- Nair, M. C., Rajesh, K. P. & Madhusoodanan, P. V. 2005. *Bryophytes of Wayanad in Western Ghats*. Malabar Natural History Society, Calicut, iv + 284 pp.
- Sandhya Rani, S., Sowghandika, M., Nagesh, K. S., Susheela, B. & Pullaiah, T. 2014. *Bryophytes of Andhra Pradesh*. Bishen Singh Mahendra Pal Singh, Dehra Dun, [9] + 279 pp.
- Weber, F. 1804. Plantae cryptogamae novae, vel minus cognitae. *Archiv für die Systematische Naturgeschichte (Leipzig)* 1(1): 123–139 + Tab. iv–v.
- Willdenow, C. L. 1788. Observationes botanicae. *Magazin für die Botanik* 2(4): 7–19 + Tab. i.