NOMENCLATURE COMMUNICATIONS

(3013) Proposal to conserve the name *Lichen pullus* Schreb. (*Parmelia pulla*, *Xanthoparmelia pulla*) against *L. pullus* Neck. (*Parmeliaceae*, lichenized *Ascomycota*) with a conserved type

Linda in Arcadia,[1] Teuvo Ahti,[2] Renato Benesperi,[3] Guillermo Amo de Paz,[4] Pradeep K. Divakar[4] & David L. Hawksworth[5]

1 *Kastri, 22013, Arkadias, Greece*
2 *Botany and Mycology Unit, Finnish Museum of Natural History, P.O. Box 7, 00014 University of Helsinki, Finland*
3 *Dipartimento di Biologia, Via la Pira 4, Università degli Studi di Firenze, 50121 Firenze, Italy*
4 *Departamento de Farmacología, Farmacognosia y Botánica, Facultad de Farmacia, Universidad Complutense de Madrid, Plaza de Ramón y Cajal, Madrid 28040, Spain*
5 *Department of Life Sciences, Natural History Museum, Cromwell Road, London SW7 5BD, United Kingdom; Comparative Fungal Biology, Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AE, United Kingdom*
Address for correspondence: *David L. Hawksworth, d.hawksworth@nhm.ac.uk*

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(3013) ***Lichen pullus*** Schreb., Spic. Fl. Lips.: 131. 9 Jul–25 Oct 1771, nom. cons. prop.
Typus: Norway, Østfold, Hvaler, Spjærøy, Spjærholmen, W side, on rock in coastal heath, 59.0617N, 10.9038E, alt. 15 m, 1 Aug 2022, *E. Timdal* (O No. L-229346; isotypus: MAF No. Lich 25274), typ. cons. prop.

(H) *Lichen pullus* Neck., Delic. Gallo-Belg.: 510. 1768, nom. rej. prop.
Typus: non designatus.

The well-established name *Xanthoparmelia pulla* (Schreb.) O. Blanco & al. (or sometimes *Neofuscelia pulla* (Schreb.) Essl.) has been used to refer to a common, brown, foliose saxicolous lichen. The basionym had, however, long been considered to be *Parmelia pulla* Ach. (Syn. Meth. Lich.: 206. 1814), and so the type had been assumed to be an Acharian collection. A specimen of *Parmelia pulla* in H-ACH 1420D (= H9502152) conforming to current usage was therefore designated as lectotype by Esslinger & Ahti (in Revista Fac. Ci. Univ. Lisboa, ser. 2, C, Ci. Nat. 17: 728 & fig. 1. ["1973"] 1975). However, one of us (L.A.) pointed out that this was incorrect, as Acharius's species name was intended as a new combination based on *Lichen pullus* Schreb. (Spic. Fl. Lips.: 131. 1771) as that name was listed as a synonym. It is therefore necessary to address the status and typification of the intended basionym to fix the application of Acharius's name.

The situation is complicated as Schreber's name is a later homonym of *Lichen pullus* Neck. (Delic. Gallo-Belg.: 510. 1768), a corticolous and not a saxicolous brown parmelioid species. The protologues of both these names include Dillenius (Hist. Musc.: 182, t. 24, fig. 77. 1742 [*sic* 1741, fide Henrey, Brit. Bot. Hort. Lit. 2: 271. 1975]), but we do not consider them isonyms because the texts make clear they were referring to species of different substrata and so should be typified accordingly. Figure 77 shows three lichens, A, B and C, but on page 182 Dillenius cited only A and B. Crombie (in J. Linn. Soc., Bot. 17: 572. 1880) studied the Dillenian collections, and stated that A was from the species now known as *Melanohalea olivacea* (L.) O. Blanco & al., and B from that now known as *Melanelixia fuliginosa* (Fr. ex Duby) O. Blanco & al. We examined high-resolution digital images of these collections and have no reason to disagree with Crombie's opinion for B, but A appears to have apothecia with papillate thalline exciples and so may be *Melanohalea exasperata* (De Not.) O. Blanco & al., rather than *M. olivacea*. Both *M. exasperata* and *M. olivacea* are almost always corticolous and fertile, whereas *Melanelixia fuliginosa* is only exceptionally corticolous and sterile with abundant isidia. Necker's lichen was therefore most likely a corticolous *Melanohalea* species, but we choose not to lectotypify it here by Dillenius's fig. 77A as we have not investigated possible implications of such a typification for *M. exasperata*.

Xanthoparmelia pulla is best retained in its current sense by conservation of Schreber's species name with a conserved type. We note that while Schreber's name was illegitimate when published, his epithet was legitimized by Sibthorp (Fl. Oxon.: 326. 1794) as *Lichen olivaceus* var. *pullus*, so while that varietal name could serve as basionym for *X. pulla* and *Parmelia pulla*, we decided not to take that route as the resultant loss of 43 years of priority at species rank could cause further complications.

The lichen is widespread and often abundant on exposed rocks in temperate Europe, northern and southern Africa, Australia, and New Zealand, and features in all standard checklists and national floras in these regions; on 1 Dec. 2023 it had 1200 citations in Google Scholar. We have chosen a fresh collection for the conserved type from Sweden, rather than the previously designated "lectotype" from that country, in order to have a type which was sequenced and where the chemistry had been examined by the latest methods. DNA sequencing is of particular importance as the lichen is sometimes treated as part of a complex of closely related species. Total genomic DNA was isolated and the internal transcribed spacer (ITS) region of the DNA, the universal DNA barcode marker adopted for fungi, was sequenced. The isolated DNA is deposited with the SYSTEMOL

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research group of the Facultad de Farmacia, Universidad Complutense de Madrid (UCM). G.A.P. obtained and deposited the ITS sequence data from the proposed new type in GenBank (Accession no. OR899250) and, assisted by P.K.D., examined it by TLC and HPLC and found it to contain: stenosporic acid (major), divaricatic acid (minor), and also traces of perlatolic, 4-O-demethylstenosporic, oxystenosporic, and gyrophoric acids.

The typification proposed here also avoids the possibility of any resurrection of *Parmelia olivacea* var. *prolixa* Ach. (Methodus: 214. 1803), which Acharius had listed as a second synonym of *Parmelia pulla*, for this species. That epithet was first used at species rank by Carroll (in J. Bot. 3: 288. 1865), and lectotypified by Esslinger & Ahti (l.c.) with the same lectotype they designated for *P. pulla* in order to render them homotypic. The epithet *prolixa* has not been used for the species in any standard work we have located since the monograph of Esslinger (in J. Hattori Bot. Lab. 42. 1–211. 1977); we found no hits in Google, apart from nomenclatural discussions, since 1912. To take up what is now an unfamiliar epithet for such a well-known lichen would clearly be disruptive and not in the interests of nomenclatural stability.

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