

Short Communications

Xanthoparmelia stenophylla, the correct name for *X. somloënsis*, one of the most widespread usnic acid containing species of the genus

Our close colleague for 30–40 years, the late Mason E. Hale Jr (1928–1990), was one of the most outstanding lichenologists of the 20th century. While he was terminally ill, he was anxious to complete his world monograph of *Xanthoparmelia* which he saw through to publication, and accepted 406 species (Hale 1990). Throughout the later periods of his career, his major aim was to document and describe the enormous extent of diversity in the graphidaceous and parmelioid lichens worldwide, and especially in the tropics where he travelled and collected extensively, describing numerous species new to science, 386 in parmelioid groups (Hale & DePriest 1999). In his later years he had, understandably, little time for the nuances of the *Code*, and, if the principle of adopting proposals for the protection of Names in Current Use (Greuter 1991) had been adopted this would have not caused problems. Sadly it was not, which means that some issues have to be reconsidered. One of these is the correct name for one of the commonest species of *Xanthoparmelia*, for which he used the name *X. somloënsis* in his monograph. During the last 15 years, many lichenologists have followed Hale in adopting *X. somloënsis*, but the nomenclaturally correct name for this species proves to be *X. stenophylla*.

In earlier times this lichen was included in *Parmelia conspersa*, generally as a variety, but Du Rietz (1921) recognized it as meriting specific rank as *P. stenophylla*, although he later used the name *P. molliuscula* for it as did Zahlbruckner (1929). In his early studies

on the group in North America, Hale (1955, 1956) adopted *P. stenophylla*, but at one time started to use *P. taractica* (Hale & Culberson, 1966). However, both *P. molliuscula* and *P. taractica* emerged later to belong to non-European species.

Xanthoparmelia stenophylla (Ach.) Ahti & D. Hawksw., comb. nov.

Parmelia conspersa var. [β.] *stenophylla* Ach., *Meth. Lich.*: 206 (1803); type: [Sweden? Sine loc., coll. & dat.] (H-ACH 1347A—lectotype selected by Hale, 1990: 192; BM-ACH 607—isolectotype).

Parmelia stenophylla (Ach.) Heugel, *Corresp. Naturf. Ver. Riga* 8: 109 (1855).

Parmelia somloënsis Gyeln., *Feddes Repert.* 29: 156 (1931); type: Hungary, Com. Veszprém prope pagum Doba, in declivibus montis Somló, ad rupem basalticum, c. 400 m, 19 Aug. 1925, V. Gyelnik (BP 21738T704—lectotype selected by Verseghy, 1964: 111, as ‘holotypus’; H—isolectotype).

Xanthoparmelia somloënsis (Gyeln.) Hale, in Ahti et al., *Mycotaxon* 28: 96 (1987); non *Parmelia stenophylla* Müll. Arg., *Bull. Soc. R. Bot. Belg.* 32: 128 (1894).

Hale (1990: 192) gives the type details of Acharius’ name as ‘Sweden, s. c. (H-Ach, lectotype; BM-Ach, isolectotype)’. In H-ACH there is only one sheet under the name *stenophylla*, and it was annotated as the type by Hale in 1961; the sheet was then unnumbered and has three specimens on it, the larger of which he annotated as ‘holotypus’ (Fig. 1). There are three unlocalized specimens in BM-ACH 607 (BM 000500719), and the larger looks like part of that in H-ACH 1347A and is therefore considered an isolectotype here. The BM-ACH collection is especially important for the interpretation of Acharian names as this

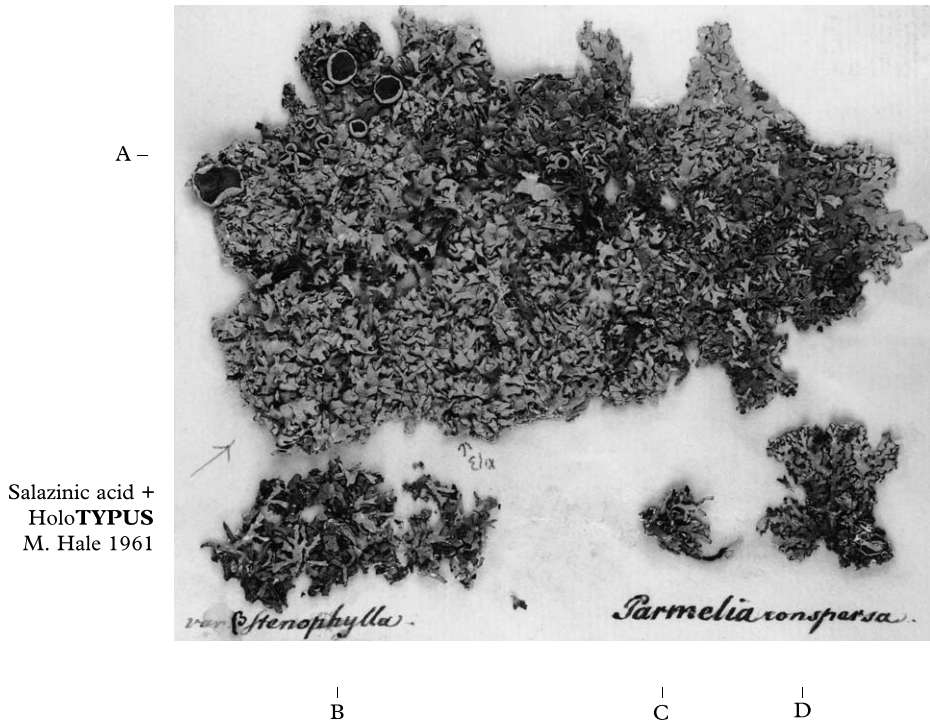


FIG. 1. Lectotype material of *Parmelia conspersa* var. [β .] *stenophylla* Ach. (H-ACH 1347 A).

material appears to represent the set of specimens with which Acharius actually worked when preparing the texts of both the *Methodus* and the later *Lichenographia Universalis* (Tibell, 1987; Galloway, 1988). The lectotype specimen in H-ACH (Fig. 1A) and the BM-ACH specimens are all narrow-lobed and lack isidia; the lectotype in H-ACH and the isolectotype in BM also support the lichenicolous fungus *Lichenostigma cosmopolites* (Hafellner & Calatayud, 1999) which is restricted to but very common on *Xanthoparmelia*.

The epithet '*stenophylla*' was first used in the rank of species by Heugel (1855: 109) who employed the binomial twice on the same page of his paper, as "*Parmelia stenophylla* Ach." and "*Parm. stenophylla*" with no term denoting rank between the generic and species name. The species is discussed in a main entry for "*Parmelia conspersa* Ach.", but Heugel was clear this was distinct from that and either a separate species, or an

infraspecific taxon within *Arctoparmelia centrifuga* (as *Parmelia centrifuga*). Heugel states "Theils werden diese verschiedenen Formen als eigene Arten unterschieden, theils als besondere Abarten unter *Parmelia centrifuga* Schaer. (Linn.) zusammengestellt." [Transl.: Sometimes these different forms are accepted as separate species, sometimes they are classified as infraspecies under *P. centrifuga*.] In the next paragraph he then uses "*Parm. stenophylla*" without any hint of doubt as to specific status, explaining that there is another narrow-lobed lichen in the area, *Parmeliopsis ambigua* (as *Parmelia diffusa*), which is a different species. There is no separate treatment of *Parmelia stenophylla* as Heugel did not find the taxon in the Baltic Republics he was reporting on, but he had seen it in the Riesengebirge (Giant Mountains) now located on the border of the Czech Republic and Poland.

Hale (1990: 193) did not accept Heugel's usage of "*stenophylla*" as validating the epi-

thet *stenophylla* at species rank, “since he [Heugel] obviously did not intend to make a new combination”, and referred to Art. 34.3 concerning incidental mention in the 1983 edition of the *Code*, which was not included in the 1987 or subsequent editions. While Heugel did put two options forward, he clearly came down on the side of treating the taxon as a species when introducing *Parmeliopsis ambigua*. Heugel’s usage meets the requirement for valid publication of new combinations in Art. 33.1 of the current *Code* (Greuter *et al.* 2000) as he “definitely associates the final epithet with the name of the genus or species, or with its abbreviation”. Further, although he does not provide the full varietal name used by Acharius, his use of “Ach.” means that the requirements of Art. 33.2 are also fulfilled; fuller details are not mandatory for names published prior to 1 January 1953. This means that the combination has to be accepted as validly published, and therefore that *stenophylla* is the earliest name used at species rank; it thus requires transfer to *Xanthoparmelia* and the necessary new combination is therefore made here. As “*stenophylla*” had been used consistently for this taxon at different ranks from 1803 to 1987, apart from some authors who adopted “*taractica*” from the mid-1960s to 1980s, and “*somloënsis*” has only come into widespread use since Hale’s monograph of 1990, we saw no case for invoking the conservation procedures provided for in the *Code* in this instance.

Acharius’ epithet was also used at species rank by Du Rietz (1921: 176) who clearly attributed the change in rank to himself, using the form “(Ach.) Du Rietz”. He may well not have been aware of Heugel’s publication which was in a particularly obscure journal. The first place of publication of Du Rietz’s usage has often been cited as in Lynge (1921: 149), but at the end of the text, that work is stated to have only been printed on 6 Dec. 1921, while Du Rietz’s (1921) paper was published on 26 Feb. 1921.

The nomenclature is complicated by the description of another lichen from trees in Costa Rica under the name *Parmelia steno-*

phylla by Müller-Argoviensis (1894: 128). This clearly has nothing to do with Acharius’ name as on the following page Müller Argoviensis mentions “v. *stenophylla* Ach.” in an entry for *P. conspersa* (*loc. cit.*: 129). This meant that had Heugel’s combination not been made earlier, Acharius’s epithet could not have been employed in *Parmelia* as it would have been a later homonym (Art. 53.1). Now, accepting Heugel’s transfer as valid, this means that it is Müller Argoviensis’ binomial that has to be rejected as an illegitimate later homonym. This has no immediate nomenclatural consequences as the precise application of Müller Argoviensis’ name is uncertain; according to Hale (1976: 26) it represents a species of *Bulbothrix*, but the material was too fragmentary for reliable identification so the name was not taken up in that genus. In the event that the material was later identified, it would not threaten any name currently in use now it is recognized as being illegitimate.

The existence of Müller-Argoviensis’ homonym and the view that Heugel’s name was not validly published led Hale (1990) to take up the next available species name for the species, *P. somloënsis* Gyeln., described from rocks on Somló mountain in the Bakony Mountains of Veszprém County in Hungary. We have not studied the Gyelnik material in BP, but have seen the islectotype in H and also topotype material from the original locality distributed by Vězda (*Lich. Sel. Exs.* No. 2173, BM, H) which represents the same taxon as that of Acharius. However, the lectotype (BP 21738T704) has recently been re-examined by Orthová-Slezáková (2004), who also discusses the typification of several specific and infraspecific names introduced by Gyelnik which are also synonyms of the species here recognized as *X. stenophylla*.

In his monograph, however, we note that Hale (1990: 195) appears to have had some misgivings as to whether his views on the validity of Heugel’s combination were correct as he says: “While *stenophylla* would have been available in *Xanthoparmelia*, I in effect blocked this possibility in 1987 . . . by recombining in *Xanthoparmelia* the next

available epithet in *Parmelia*, *P. somloënsis*". However, names can only be "blocked" under the *Code* in this way if a homonym would thereby be created if the epithet was combined under the new generic name; it is the earliest legitimate name used in the same rank that has priority, whether or not it is already transferred to the genus in question (Art. 11.4). Hale's interpretation is that of the so-called Kew Rule (Stevens 1991), a practice used by botanists at the Royal Botanic Gardens Kew in the mid-nineteenth century and followed by Adolf Engler in Germany, Asa Gray in the USA, and many others into the 1880s. This procedure accepted as the correct name the first to be used with the appropriate generic name, even if earlier species epithets existed under other generic names. This is the normal practice in zoological nomenclature, and avoids many otherwise disruptive name-changes, but is not acceptable under the botanical *Code*.

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