

## Bryological Notes

### Lectotypification of *Bryum moravicum* Podp. (Bryopsida: Bryaceae)

*Bryum moravicum* was recently adopted (Holyoak, 2004) as the oldest name for the species named by Syed (1973), as *Bryum laevifilum* a European member of the *Bryum capillare* Hedw. complex with filiform axillary gemmae that commonly grows as an epiphyte on deciduous trees. The same taxon has also been incorrectly referred to in recent literature as *B. flaccidum* Brid. or *B. subelegans* Kindb.

Josef Podpěra often labelled more than one specimen a type when he introduced a new name. In these cases it is desirable to locate the relevant specimens, check their identification and designate a lectotype to ensure that the name is correctly applied. Both Syed (1973) and Holyoak (2004) studied a specimen labelled as a type of *Bryum moravicum* by Podpěra that is housed in the Stockholm herbarium (S). However, in the original description Podpěra (1906) stated that his newly described species grew ‘in several places’, so that it might be inferred that several type specimens existed in his herbarium. Such additional type material might show greater variability than the specimen in S or perhaps even belong to other taxa within the *Bryum capillare* complex. The present paper describes the additional type material of *Bryum moravicum* and designates a lectotype.

Most of Podpěra’s original herbarium is now deposited in the Cryptogamic Herbarium of the Department of Botany, Charles University of Prague in the Czech Republic (PR), but his collection of *Bryum* remained in the Herbarium Musei Moraviae at Brno in the Czech Republic (BRNM). Search at BRNM yielded five specimens of *Bryum moravicum*, collected at the locality [now in the Czech Republic] described in the protologue by Podpěra (1906), which can be translated from Czech as ‘Ivančice: on wet rocks of Permian conglomerates in front of Řeznovice on Oslava in several places’. There are four specimens (BRNM No. 163685, 163686, 163687, 163688), labelled ‘*Bryum moravicum* Podp. 05’ with the locality: Ivančice: ad rupes, conglomerata permica pr. Řeznovice, c. 250 m, IV.1905 leg. J. Podpěra’. The specimens are pencil-marked in Podpěra’s hand-writing I–IV, respectively, and were later annotated by him with ‘*B. capillare* L. var. *moravicum* Podp. 1912’ (referring to his later combination of the taxon). A fifth specimen (BRNM No. 136384) was labelled by Podpěra ‘*Bryum*

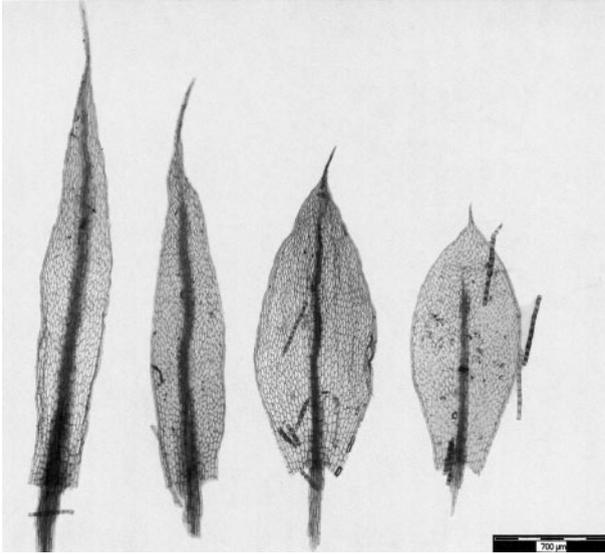
*capillare* var. *moravicum* Podp. 1912, Permkonglomerate im Iglawatale [=valley of Jihlávka] bei Eibenschitz [=Ivančice], 1905.IV. leg. J. Podpěra’. This specimen is marked in pencil with V; the locality might be identical to that of specimens I–IV since it is merely an inexact German translation.

The specimen at S has data almost identical to that of specimens I–IV at BRNM (‘Flora moravica. Ivančice: ad rupes, conglomerata permica, pr. Řeznovice, c. 250 m, IV.1905 leg. J. Podpěra’).

Specimens I–IV at BRNM appear completely identical and were probably portions taken from the same tuft. Specimen V at BRNM also shows identical characters. Our descriptions and measurements, and the drawings in Syed (1973) suggest the specimen at S is closely similar to material at BRNM and the virtually identical data suggest it may be another portion of the same tuft as BRNM specimens I–IV. The characters of all of this material conform closely with the protologue of *Bryum moravicum* Podp. (Podpěra, 1906).

All of the specimens include plants with remarkable narrow leaves like those figured by Syed (1973, p. 323, fig. 30a–d). However, as noted by Holyoak (2004) many of them have at least some broader lower leaves and some of the plants show leaf characters typical of *B. laevifilum*. To illustrate the variability in leaf shape, Fig. 1 shows several leaves from one plant of the specimen annotated by Podpěra with ‘I’ [designated below as the lectotype of *B. moravicum*]. The decurrent leaf base is shown in Fig. 2. Characters of the additional material thus support adoption of the name *B. moravicum* Podp. [1906] in place of *B. laevifilum* Syed [1973].

In Britain *B. laevifilum* seems to be almost an ‘obligate epiphyte’ (in the sense of Smith, 1982) rather than merely a ‘facultative epiphyte’ like the closely allied and commoner *B. capillare*. Thus, Crundwell (1994) noted that *B. laevifilum* grows mainly ‘on trunks and branches of elder, ash, sycamore, maple and other trees’ occurring ‘more rarely on stumps, rotten logs, rocks or soil’. Nevertheless, the habitat of the types of *B. moravicum* on conglomerate rock need not imply it is a different species, since *B. laevifilum* has been reported (under various names) from rock substrata in, for example, Andorra (Townsend, 1999), Austria (Grims, 1999), Sweden (Syed, 1973; Weibull, 2001),



**Figure 1.** Four leaves from lectotype of *Bryum moravicum* Podp. to show variation in leaf shape. Note presence of filamentous gemmae.

the middle and northern Urals (Goldberg, 2002a, b), eastern Siberia (Ignatov *et al.*, 2001), the High Atlas of Morocco (Ros *et al.*, 2000) and the U.S.A. (Syed, 1973). The occurrence of *B. laevifilum* on stones and rocks (usually slightly basic and shaded) in the Czech Republic is not exceptional, although even here the species is principally epiphytic.

**Lectotype**, of *Bryum moravicum* Podp., *Věstník Klubu Přírodovědeckého v Prostějově* 8, p. 41, 1906, here designated: BRNM No. 136388 (Ivančice, ad rupes, conglomerata permica pr. Řeznovice, c. 250 m, IV.1905, leg. J. Podpěra).

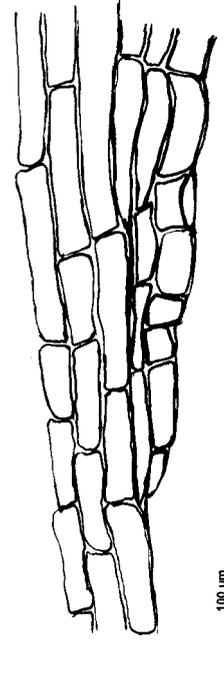
The obvious duplicates of the lectotype specimen BRNM No. 136388 are regarded here as isolectotypes (BRNM No. 163685, 163686, 163687) as is the specimen with almost identical data at S. BRNM No. 136384 ('V' of Podpěra) is regarded as a syntype, although it might in fact be another duplicate of the original collection (the label is somewhat ambiguous).

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TAXONOMIC ADDITIONS AND CHANGES: *Bryum moravicum* Podp.: lectotype designated.

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**Figure 2.** Decurrent leaf base of lectotype of *Bryum moravicum* Podp.

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