

## *Muhlenbergia myanmarensis*, a new name for *M. fasciculata* T.P.I.Phan (Poaceae)

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### Abstract

A new name, *Muhlenbergia myanmarensis* is proposed for *M. fasciculata* T.P.I.Phan, as the latter name is a later homonym.

### Introduction

The grass genus *Muhlenbergia* Schreb. (Poaceae) belongs to the subfamily Chloridoideae. Bor (1960) placed it under the tribe Agrostideae as the lemma is awned. Clayton and Renvoize (1986) referred it to the subtribe Sporobolinae in the tribe Eragrostideae based on characters like the unspecialized, one to many flowered spikelets, the 1–3-nerved lemma, and ligules that are membranous or represented by a line of hairs. Peterson et al. (2010a, b) and Soreng et al. (2015) placed it in the subtribe Muhlenbergiinae in the tribe Cynodonteae based on molecular evidence. The genus has about 182 species (Soreng et al. 2015) inhabiting steppes and mountains from subarctic North America to southern South America (Pohl 1969), as well as south-east Asia (Wu & Peterson 2006). Only eight species are known to occur in southern Asia. In India five species are reported, most of which occur in the Himalayan region, except for *M. himalayensis*, which is reported to range from the Himalayas to the Western Ghats. Delmail & Hilairé (2011) recorded another addition to the Indian Flora, namely *M. fasciculata* T.P.I.Phan from Nagaland. This species was first described by Phan (1994) from Myanmar. Phan designated two specimens as the types in the protologue; one flowering and the other fruiting, thus making the name invalid (ICN Article 40, McNeill et al. 2012). Subsequently, Delmail (2010) validated the name by citing the flowering specimen as the holotype. While doing so, Delmail attributed sole authorship of the name to Phan. The year of valid publication of the name is thus 2010, as indicated in IPNI.

### Observations

A literature survey revealed that there is another *Muhlenbergia fasciculata* published by Trinius (1824). This species is only known from the New World and is currently treated as a heterotypic synonym of *M. microsperma* (DC.) Trin. Therefore, the name given by Phan to the Myanmar specimens is a later homonym and hence illegitimate. So, the Myanmar plant does not have a legitimate name and we provide one below. The specific epithet refers to the country from where it was first collected.

## Taxonomy

***Muhlenbergia myanmarensis*** Arum., G.V.S.Murthy & V.J.Nair, **nom. nov.**

*Muhlenbergia fasciculata* T.P.I.Phan in Delmail, *Nordic Journal of Botany* 28(3): 298. 2010, non Trinius (1824: 192).

**Type:** Myanmar: Rakhine, Arakan Yoma, c. 1221 m, 11 April 1992, T.P.I. Phan PH0435 (SBXM) (Holotype selected by Delmail in *Nordic Journal of Botany* 28(3): 298. 2010).

## Acknowledgements

Authors are thankful to Dr. Paramjit Singh, Director of the Botanical Survey of India, Kolkata, for use of facilities. We also acknowledge Dr. V. Sampath Kumar of the Central National Herbarium, Howrah, for providing essential literature.

## References

- Bor NL (1960) *The Grasses of Burma, Ceylon, India and Pakistan (excluding Bambuseae)*. (Pergamon Press, London).
- Clayton WD, Renvoize SA (1986) Genera graminum, grasses of the world. *Kew Bulletin Additional Series* 13: 1–389.
- Delmail D (2010) Validation of *Muhlenbergia fasciculata* (Poaceae) endemic to Myanmar. *Nordic Journal of Botany* 28: 298. <http://dx.doi.org/10.1111/j.1756-1051.2010.00816.x>
- Delmail D, Hilaire A (2011) *Muhlenbergia fasciculata* T.P.I. Phan (Poaceae) – A new Angiospermic record for India. *Bangladesh Journal of Plant Taxonomy* 18: 69–71. <http://dx.doi.org/10.3329/bjpt.v18i1.7841>
- McNeill J, Barrie FR, Buck WR, Demoulin V, Greuter W, Hawksworth DL, Herendeen PS, Knapp S, Marhold K, Prado J, Prud'homme van Reine WF, Smith GE, Wiersma JH, Turland NJ (2012) *International Code of Nomenclature for algae, fungi, and plants (Melbourne Code)*. Adopted by the Eighteenth International Botanical Congress Melbourne, Australia, July 2011, A.R.G. Gantner Verlag KG. [Regnum Veg. 154]
- Peterson PM, Romaschenko K, Johnson G (2010a) A classification of the Chloridoideae (Poaceae) based on multi-gene phylogenetic trees. *Molecular Phylogenetics and Evolution* 55: 580–598. <http://dx.doi.org/10.1016/j.ympev.2010.01.018>
- Peterson PM, Romaschenko K, Johnson G (2010b) A phylogeny and classification of the Muhlenbergiinae (Poaceae: Chloridoideae: Cynodonteae) based on plastid and nuclear DNA sequences. *American Journal of Botany* 97: 1532–1554. <http://dx.doi.org/10.3732/ajb.0900359>
- Phan TPI (1994) *Flora from the Gulf of Bengal*. (XUKJ Press, Khaoni).
- Pohl RW (1969) *Muhlenbergia* subgenus *Muhlenbergia* (Gramineae) in North America. *American Midland Naturalist* 82: 512–542. <http://dx.doi.org/10.2307/2423793>
- Soreng RJ, Peterson PM, Romaschenko K, Davidse G, Zuloaga FO, Judziewicz EJ, Filgueiras TS, Davis JI, Morrone O (2015) A worldwide phylogenetic classification of the Poaceae (Gramineae). *Journal of Systematics and Evolution* 53: 117–137. <http://dx.doi.org/10.1111/jse.12150>
- Trinius CB (1824) De Graminibus Unifloris et Sesquifloris. Petropoli, Russia.
- Wu Z-L, Peterson PM (2006) *Muhlenbergia*. Pp. 486–487 in *Flora of China* (eflora), vol 22. (Missouri Botanical Garden, St. Louis, MO & Harvard University Herbaria, Cambridge, MA).