



Research Article

Lectotypification of the name *Rubus micropetalus* (Rosaceae)Bhavadas Narayanan^{1&2} and Balakrishnan Thara Umesh¹¹Department of Bioscience, MES College, Marampally, Aluva, Kerala, India.²Research and Development Centre, Bharathiar University, Coimbatore, Tamil Nadu, India.

Received: 07-05-2018; Revised: 5-05-2018; Accepted: 21-05-2018

Abstract: The lectotype of *Rubus micropetalus* Gardner is designated here.**Keywords:** *Rubus micropetalus*, Gardner, Rosaceae, lectotypification, Western Ghats

Introduction

The genus *Rubus* Linnaeus (1753: 492) is one of the largest genera in the family Rosaceae comprises of about 1500 species (The Plant List, 2013) distributed mainly in temperate to subtropical regions of the northern hemisphere (Lingidi & Boufford 2003), especially in Southeastern Asia, East Asia and South America (Kalkman 1993). In India, about 75 species occur with the largest concentration in eastern Himalayan states (Gupta *et al.* 2016, Hooker 1878), eight species has so far been reported from southern part of Western Ghats (Sasidharan 2004, Gamble 1919). Presently, the genus is considered as one of the most difficult group for species delimitation and there is no remarkable taxonomic works available in India except some notes in local floras. Due to lack of necessary scientific data, majority of species names being referred as “unresolved names” in scientific databases (eg: www.theplantlist.org).

While on clarifying the taxonomic disputes of genus *Rubus* in Southern Western Ghats, it is revealed that, the species *R. micropetalus* was published without designation of types. Therefore, we have scrutinized the protologue of *R. micropetalus* Gardner (1847: 6) from Biodiversity Heritage Library (BHL) and then followed by the herbarium studies, found that *R. micropetalus* is needed to be typified.

Typification of the name

Rubus micropetalus Gardner (1847: 6)

Type (lectotype, designated here):—SRI LANKA, Ellia plains, 6000 ft, G. Gardner 263 (K barcode K000737927 [digital image!]; isolectotypes, K barcode K000737929, K000737930 [digital images!]; BR barcode BR0000005294473 [digital image!]; BM barcode BM000622290 [digital image!]) Fig. 1

Figure 1. Digital image of lectotype of *Rubus micropetalus* Gardner.

Nomenclatural notes: Gardner proposed the species *Rubus micropetalus* in 1847 based on a collection from Ellia hills, Sri Lanka. We traced 5 specimens which represent duplicates from a homogeneous collection (263, author cited in the protologue), three specimens at K and one each at BR and BM. All the specimens have collector's name and locality mentioned over them and are well preserved with flowers and fruits. Thomson's collection of *R. micropetalus* from Sri Lanka (barcode K000737928) are mounted in one sheet (left side) along with Gardner's collection (263 barcode K000737929). In this sheet, hand drawings of dissected floral parts are mounted in the upper side

*Corresponding Author:

Bhavadas Narayanan,
Bharathiar University, Coimbatore,
Tamil Nadu, India.
E-mail: bhavadas1988@gmail.com



based on Gardner's and Thomson's collection. The only one data not matching with the specimen is the difference in altitude, i.e; in the protologue the author mentioned altitude as 5000 ft. and in the specimen it is written as 6000 ft. However, it may be considered as a minor error as other available data are perfectly matching. We have also traced one more specimen housed at K (1537 barcode K000737926 [digital image!]). According to Art. 9.3 of Melbourne Code (McNeill *et al.* 2012) the specimen kept in K (263, K barcode K000737927 [digital image!]) is well preserved, matches with the description well and hence designated here as the lectotype.

Acknowledgements


Authors are thankful to Dr. Indira Balchandran, Director, Centre for Medicinal Plant Research (CMPR), Malappuram for the facilities given. We are also thankful to Dr. K.M. Prabhu Kumar and V.V. Naveen Kumar, Scientist, Plant Systematic and Genetic Resources Division, CMPR, for his help. Thanks are also due to Marie-Helene Weechthe, Royal Botanic Gardens, Kew for providing the digital image.

References

- Gupta, Chandani, Sudhansu Sekhar Dash, and Anthony Robert Brach. "Lectotypification of two names in the genus *Rubus* L. (Rosaceae)". *Phytotaxa* 266 . 4 (2016): 297–300. Print.
- Gamble, James Sykes. "Rubus: In: Flora of the Presidency of Madras. Vol 2", London: Adlard & Son & West Newman, Ltd. (1919): 439–442.
- Gardner, George. "Contributions towards flora of Ceylon". *Calcutta Journal of Natural History Society* 8 (1847): 6.
- Hooker, Joseph Dalton. "Rosaceae". In: Hooker, J.D. (Ed.) *The Flora of British India*, 2. London, UK. (1878): 307–388.
- Kalkman, Cornelis. "Rosaceae". *Flora Malesiana*, ser. 1. 11. 2 (1993): 227–351. Print.
- Linnaeus, Carl. "Species Plantarum", 1. Holmiae, Sweden. (1753): 560 pp.
- Lingidi, Lu, and David E. Boufford. "Rubus L.". In: Wu, Zhengyi, and Peter H. Raven, P.H. (Eds.) *Flora of China*, 9. Science Press, Beijing and Missouri Botanical Garden Press, St. Louis, USA. (2003): 195–286.
- McNeill, J., F.R. Barrie, W. R. Buck, V. Demoulin, W. Greuter, D.L. Hawksworth, P.S. Herendeen, S. Knapp, K. Marhold, J. Prado, W.F. Prud'Homme Van Reine, G.F. Smith, J. H. Wiersema, and N.J. Turland. "International Code of Nomenclature for algae, fungi, and plants (Melbourne Code) adopted by the Eighteenth International Botanical Congress Melbourne, Australia". (2012): July 2011. [Regnum Vegetabile 154]. Print.
- Sasidharan, N. "Biodiversity documentation for Kerala. Part.6: Flowering Plants". Kerala Forest Research Institute, Peechi, Kerala. (2004): 166–167. Book
- The Plant List. "Version 1.1". Royal Botanic Gardens Kew (2013). Available from: <http://www.theplantlist.org/> (accessed 07 March 2018).

Cite this article as:

Bhavadas Narayanan and Balakrishnan Thara Umesh. Lectotypification of the name *Rubus micropetalus* (Rosaceae). *Annals of Plant Sciences* 7.6 (2018) pp. 2352-2353.

 <http://dx.doi.org/10.21746/aps.2018.7.6.9>

Source of support: Centre for Medicinal Plant Research (CMPR), Malappuram, India.

Conflict of interest: Nil