



## ***Musa velutina* subsp. *markkuana* (Musaceae): a new subspecies from northeastern India**

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### **Abstract**

A new subspecies of *Musa velutina* belonging to section *Rhodochlamys* from northeastern India is described and illustrated as *Musa velutina* subsp. *markkuana*. A detailed description, distribution, ecology, phenology and relevant taxonomic notes are provided.

**Key words:** *Musa dasycarpa*, *Musa*, section *Rhodochlamys*

### **Introduction**

Musaceae, includes three genera: *Ensete* Bruce ex Horaninow (1862: 40), *Musa* Linnaeus (1753: 1043) and *Musella* (Franchet) Wu (1978: 57), all native to the Paleotropics. India is well known for its genetic diversity of members of Musaceae including wild species with seeds and seedless cultivars with various ploidy. In India wild *Musa* spp. are mostly distributed in the northeastern States, the Western and Eastern Ghats and the Andaman and Nicobar Islands. However, many regions within its center of diversification in northeastern India have not been explored systematically due to various factors such as their occurrence in dense evergreen forests, civil unrest in the region, etc., hence many taxa remain to be described. Recently many species have been reported from other countries in Asia, especially China, Myanmar and Vietnam; most recently *M. haekkinenii* N.S.Lý & Haev. (Lý *et al.* 2012: 33). Whereas only a few new species have been reported from India since Hooker (1894), northeastern India and the above mentioned countries belong to the same floristic region, hence we can expect some additional unknown taxa from India.

According to Cheesman (1947: 108), genus *Musa* was divided into four sections: *Australimusa* (2n=20), *Callimusa* (2n=20), *Musa* (as *Eumusa*) (2n=22) and *Rhodochlamys* (2n=22), based on chromosome number and morphological characters. This classification has been widely accepted by subsequent botanists (e.g. Shepherd 1988, 1999). This paper focuses on a new subspecies of *M. velutina* (1875: 65), which belongs to section *Rhodochlamys*, which is characterized by having erect or drooping inflorescence with fruit pointing towards the apex of the infructescence. Most species also have relatively few fruits and brightly colored bracts, a feature that makes them popular ornamental plants (Cheesman 1947, Simmonds 1962, Shepherd 1999, Häkkinen & Sharrock 2002). *Musa velutina* first described by Wendland & Drude (1875) from a plant that flowered in the garden at Herrenhausen Botanic Garden at Hannover, from seeds collected by Gustav Mann from Upper Assam, India. However unknown to them, the same species had already been published earlier as *M. dasycarpa* (1867: 301). The confusion of these two names was initiated when Baker (1893) synonymised *M. dasycarpa* under *M. velutina*. Subsequently botanists used the latter name (Schumann 1900, Simmonds & Weatherup 1990), and this name became well-established in horticulture. Cheesman (1949) was the first to criticize the validity of the synonymisation and stated that “if Baker was sure of the synonymy he should have used Kurz’s *M. dasycarpa* which dates from 1865 instead of *M. velutina* dates from 1875”.