



A new variety of *Musa balbisiana* Colla (Musaceae) from South India

ALFRED JOE, P.E. SREEJITH & MAMIYIL SABU*

Department of Botany, University of Calicut, Thenjipalam, Kerala, India- 673 635

*Corresponding author: msabu9@gmail.com

Abstract

Musa balbisiana var. *elavazhai*, a new variety from South India is described here. A detailed description and photographs are provided for the easy identification of the variety.

Key words: cultivated plant, dining plates, Kerala, *Musa*, *Musa balbisiana* var. *elavazhai*

Introduction

Musa balbisiana Colla (1820: 56) is one of the most important species involved in the origin of cultivated bananas (Simmonds 1962, 1966, Nayar 2010) and is distributed from India to Papua New Guinea. Earlier it was believed that this species possessed only limited variability (Ude *et al.* 2002b, Uma *et al.* 2005, 2006). However, recent works have shown *M. balbisiana* also possesses good level of infraspecific variability (Wu & Kress 2000, Ude *et al.* 2002a, 2002b, Uma *et al.* 2005, 2006). During the taxonomic revision of Musaceae in India, the authors noticed a wide range of morphological variation in *M. balbisiana*, especially for its populations distributed in the North-East India, Peninsular India and Andaman and Nicobar Islands.

This paper described a new variety, *M. balbisiana* var. *elavazhai*, which is widely cultivated in South India for its leaves. Though the fruits are not edible, it is still cultivated in home gardens in Kerala for its unique quality of producing quality leaves. Banana leaves are of great demand in South India for various purposes especially as “dining plates” (Jacob, 1952).

Material and Methods

This new variety is described from a cultivated plant in the Calicut University Botanical Garden (CUBG), which would have been collected from Kerala or adjoining States. The type specimens are deposited in Calicut University Herbarium (CALI) and Madras Herbarium (MH).

Taxonomy

Musa balbisiana Colla var. *elavazhai* A.Joe, Sreejith & M.Sabu, var. nov. (Fig. 1).

Similar to *M. balbisiana* var. *andamanica* (1998: 157), but differ from it in having fruits in nearly horizontal rachis, pseudostem olive green when young and with black coloration when mature, 5–8 suckers in a clump, fruits curved, with long pedicel and apex lengthily pointed and almost round seeds.

Type:—INDIA, Kerala: Malappuram Dist., Calicut University Botanical Garden (cultivated), 30 August 2013, *M. Sabu & A. Joe 130779* (holotype: CALI!, isotype: MH!)

References

- Colla, L. (1820) Memorie Sul Genere *Musa*. *Memorie della Reale Accademia Delle Scienze di Torino* 25: 56–57.
- Jacob, K.C. (1952) Madras Bananas: A Monograph. Madras: Superintendent Government Press.
- Nayar, N.M. (2010) The Banana: Botany, Origin, Dispersal. In: Janick, J. (Ed.) *Horticultural Reviews* 36: 127–129.
- Simmonds, N.W. (1962) *The Evolution of bananas*. London: Longmans.
- Simmonds, N.W. (1966) *Bananas*. 2nd ed. London: Longmans.
- Singh, D.B., Sreekumar, P.V., Sharma, T.V.R.S., & Bandyopadhyay, A.K. (1998) *Musa balbisiana* var. *andamanica* (Musaceae) – A new banana variety from Andaman Islands. *Malayan Natural Journal* 52 (3 & 4): 157–160.
- Ude, G., Pillay, M., Nwakanma, D. & Tenkouano, A. (2002a) Analysis of genetic diversity and sectional relationships in *Musa* using AFLP markers. *Theoretical and Applied Genetics* 104: 1239–1245.
<http://dx.doi.org/10.1007/s00122-001-0802-3>
- Ude, G., Pillay, M., Nwakanma, D. & Tenkouano, A. (2002b) Genetic diversity in *Musa acuminata* Colla and *M. balbisiana* Colla and some of their natural hybrids using AFLP. *Theoretical and Applied Genetics* 104: 1246–1252.
<http://dx.doi.org/10.1007/s00122-002-0914-4>
- Uma, S., Siva, S.A., Saraswathi, M.S., Durai, P., Sharma, T.V.R.S., Singh, D.B., Selvarajan, R. & Sathiamoorthy, S. (2005) Studies on the origin and diversification of Indian wild banana (*Musa balbisiana*) using arbitrarily amplified DNA markers. *Journal of Horticultural Science and Biotechnology* 80: 575–580.
- Uma, S., Siva, S.A., Saraswathi, M.S., Manickavasagam, M., Durai, P., Selvarajan, R. & Sathiamoorthy, S. (2006) Variation and intraspecific relationships in the Indian wild *Musa balbisiana* (BB) populations as evidenced by RAPD. *Genetic Resources and Crop Evolution* 55: 349–355.
<http://dx.doi.org/10.1007/s10722-004-0576-y>
- Wu, D.L. & Kress, W.J. (2000) Musaceae. In: Wu, C.Y. & Raven, P.H. (Eds.) *Flora of China* 24: 314–318.