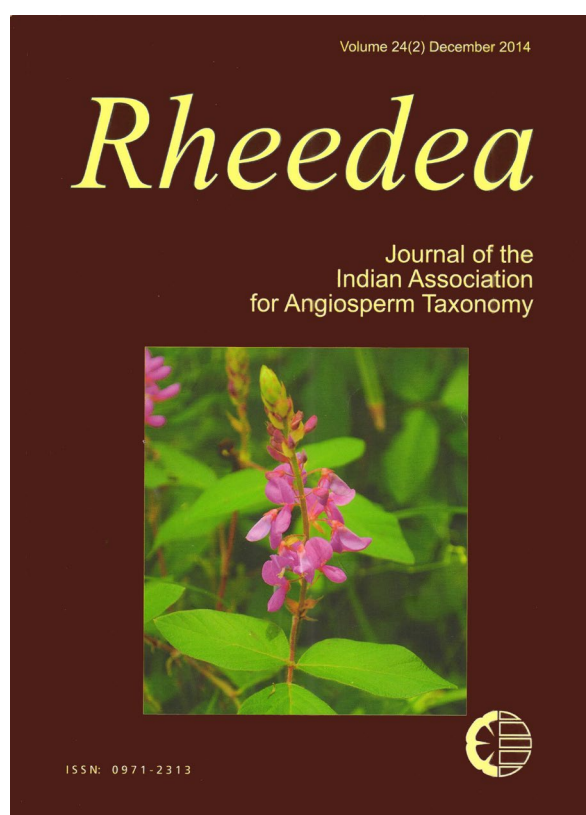




## Lectotypification of *Moringa concanensis* (Moringaceae)

Deshpande S.M., Gholave A.R., Kambale S.S. & S.R. Yadav



How to cite:

**Deshpande S.M., Gholave A.R., Kambale S.S. & S.R. Yadav 2014.** Lectotypification of *Moringa concanensis* (Moringaceae). *Rheedia* 24(2): 108-109.

<https://dx.doi.org/10.22244/rheedia.2014.24.02.04>

Received: 18.03.2014

Revised and accepted: 03.09.2014

Published in print: 31.12.2014

Published Online: 31.12.2014



## Lectotypification of *Moringa concanensis* (Moringaceae)

S.M. Deshpande, A.R. Gholave\*, S.S. Kambale and S.R. Yadav  
Angiosperm Taxonomy Laboratory, Department of Botany, Shivaji University  
Kolhapur, Maharashtra - 416 004, India.  
\*E-mail: agholave@gmail.com

### Abstract

*Moringa concanensis* Nimmo ex Dalzell & Gibson is lectotypified and the image of selected specimen is provided.

**Keywords:** Bombay, Lectotype, Syntype

### Introduction

The genus *Moringa* Adans. is represented by 13 species (Mabberley, 2008) in the world, of which only 2 species viz. *M. oleifera* Lam. and *M. concanensis* Nimmo ex Dalzell & Gibson are found in India (Hooker, 1879). *Moringa concanensis* is widely distributed species which occurs in hilly regions of Eastern Ghats (Pullaiah & Chennaiah, 1997), Western Ghats (Prasanna, 2000) Rajasthan (Pandey, 1987), Madhya Pradesh (Kumar, 1997) and Baluchistan & Sind of Pakistan (Qaiser: Flora of Pakistan Database, 2014 at <http://www.tropicos.org/Project/Pakistan>). After examining protologue (Graham, 1839; Dalzell & Gibson, 1861) and subsequent publication (Verdcourt, 1985) it was found that this name needs lectotypification. In present communication *M. concanensis* is lectotypified following Art. 9.2 & 9.11 of the Melbourne Code (McNeill *et al.*, 2012), and image of the designated lectotype (Fig. 1) is also provided.

***Moringa concanensis*** Nimmo ex Dalzell & Gibson, Bombay Fl.: 311. 1861; Hook. f., Fl. Brit. India 2: 45. 1879; T. Cooke, Fl. Bombay: 283. 1903; Verdc., Kew Bull. 40: 12. 1985; Pandey in Shetty & Singh, Fl. Rajasthan 196. 1987; Kumar in Mudgal *et al.*, Fl. Madhya Pradesh 1: 310. 1997; Pullaiah & Chennaiah, Fl. Andhra Pradesh 1: 231. 1997; Prasanna in Singh & Karthikeyan, Fl. Maharashtra, Dicot. 1: 589. 2000.

**Lectotype:** (designated here): INDIA, **Maharashtra**, Bombay, *s.die*, N.A. Dalzell *s.n.* K (K000695641), image!

**Fig. 1**

Graham (1839) in his catalogue states that “A

new species discovered by Mr. Nimmo in the South Concan.” But, no description was provided. Later Dalzell & Gibson (1861) validated the name



**Fig.1.** *Moringa concanensis* (*s.die*, N.A. Dalzell *s.n.*, K; Lectotype designated here) [Reproduced with kind permission of the Board of Trustees, Royal Botanic Gardens, Kew.]

by providing description. However, neither Graham (*l.c.*) nor Dalzell & Gibson (*l.c.*) cited any specimen in their publications. Verdcourt (1985) in his synopsis on Moringaceae stated that “the true types presumably in Calcutta.” Qaiser (*l.c.*) stated that type is presently untraceable. After enquiry at the CAL & BSI it has been confirmed that types are not available at respective herbaria. However we could trace two specimens at K which were collected by Dalzell one (K000695641) from Bombay and the other (K000695640) from Lus, Baluchistan. Specimen (K000695640) bears only locality detail i.e. ‘Lus, Baluchistan’. This locality has been mentioned by Dalzell & Gibson in their publication while specimen (K000695641) from Bombay bears annotation by Dalzell i.e. “5 anthers aborted much smaller than the others. Flowers in Oct. Petals yellowish streaked with pink” which agrees well with the description and locality provided in the publication. Due to these reasons both specimens can be considered as original materials and qualifies to be designated as the lectotype. As specimen with barcode no. K000695641 has annotation accompanied with description and locality details it has been selected as lectotype and specimen with barcode no. K000695640 will remain as syntype.

## Acknowledgements

Authors are grateful to the Board of Trustees of Royal Botanic Gardens, Kew, for permission to publish the images of the selected lectotype. Authors sincerely acknowledge Dr. K. N. Gandhi, Senior Nomenclatural Registrar, HUH, Cambridge, for his critical comments and suggestions on the manuscript. The senior author thanks MoEF, for financial assistance. ARG thanks Department of Biotechnology (DBT-IPLS) for financial assistance. SSK thanks the University Grants Commission (F1 – 17.1/2010/MANF- BUD-MAH- 6838) for the financial assistance. Authors are grateful to the two anonymous reviewers for efforts taken to improve this manuscript. Authors are also thankful to the Head, Department of Botany, Shivaji University, Kolhapur, for laboratory facilities.

## Literature Cited

**Dalzell, N.A. & A. Gibson. 1861.** *The Bombay Flora*: Education Society's Press, Bombay. p. 311.

**Graham, J. 1839.** *A Catalogue of the plants growing in Bombay and its vicinity*. Government Press, Bombay. p. 43.

**Hooker, J.D. 1879.** *The Flora of British India*. Vol. 2. L. Reeve & Co., London. pp. 45.

**Kumar, A. 1997.** Moringaceae. In: Mudgal, V., Khanna, K.K. & P. Hajra (Ed.), *Flora of Madhya Pradesh*. Vol. 2. Botanical Survey of India, Kolkata. pp. 310-311.

**Mabberley, D.J. 2008.** *Mabberley's Plant Book: a portable dictionary of plants, their classification and uses*. Third Edition. Cambridge University Press, Cambridge. pp. 558

**McNeill, J., Barrie, F.R., Buck, W.R., Demoulin, V., Greuter, W., Hawksworth, D.L., Herendeen, P.S., Knapp, S., Marhold K., Prado, J., Prud'homme van Reine, W.F., Smith, G.F., Wiersema, J.H. & N.J. Turland 2012.** International Code of Nomenclature for algae, fungi, and plants (Melbourne Code). *Regnum Veg.* 154. Koeltz Scientific Books, Koenigstein.

**Pandey, R.P. 1987.** Moringaceae. In: Shetty, B.V. & V. Singh (Ed.), *Flora India. Series 2. Flora of Rajasthan*. Botanical Survey of India. pp. 196-197.

**Prasanna, P.V.** Moringaceae. In: N.P. Singh & S. Karthikeyan (Ed.), *Flora of Maharashtra State, Dicotyledones*. Vol. 1. Botanical Survey of India, Kolkata. pp. 589-590.

**Pullaiah, T. & E. Chennaiah 1997.** *Flora of Andhra Pradesh* Vol. 1. Scientific Publishers, Jodhpur.

**Verdcourt, B. 1985.** A Synopsis of the Moringaceae. *Kew Bull.* 40: 1-23.

**Web Source:** *Flora of Pakistan Database*. at <http://www.tropicos.org/Project/Pakistan>.

---

Received: 18.03.2014

Revised and Accepted: 03.09.2014