

Lectotypification of *Cyrtopera mannii* H.G. Reichenbach (Orchidaceae)^a

Vikas Kumar¹, D.K. Agrawala^{2,*}, H.J. Chowdhery¹ & N.S. Bankoti³

Mots-clés/Keywords : *Eulophia*, India/Inde, typification.

Abstract

Typification of *Cyrtopera mannii* H.G.Reichenbach [= *Eulophia mannii* (H.G.Reichenbach) J.D.Hooker] is discussed and a lectotype is selected for this species.

Résumé

Lectotypification de *Cyrtopera mannii* H.G.Reichenbach (Orchidaceae) – La typification de l'orchidée terrestre *Cyrtopera mannii* H.G.Reichenbach [= *Eulophia mannii* (H.G.Reichenbach) J.D.Hooker], endémique du nord-est indien, est discutée et le choix d'un lectotype parmi les syntypes de Reichenbach est argumenté.

Introduction

Cyrtopera mannii H.G.Reichenbach [= *Eulophia mannii* (H.G.Reichenbach) J.D.Hooker], a terrestrial orchid endemic to N.E. India, was first described by H.G.Reichenbach in 1872, based on specimens collected from Upper Assam by Gustav Mann. While describing the species, Reichenbach did not indicate a particular specimen as type/holotype because it was not mandatory during those days to designate the holotype for valid publication of a name. Thus, amongst G.Mann's collections, all specimen(s) of *Cyrtopera mannii*, collected from 'Upper Assam' as mentioned in the protologue and examined by Reichenbach while describing the species, can now be regarded as syntypes.

^a : manuscrit reçu le 19 septembre 2014, accepté le 6 octobre 2014

article mis en ligne sur www.richardiana.com le 13/10/2014 – pp. 91-95 - © Tropicalia
ISSN 1626-3596 (imp.) - 2262-9017 (élect.)

Pearce & Cribb (2002) have referred to the type of this species as “Types: India, Upper Assam, *Mann* 6 (syn. K!); Assam, *Mann* 12 (syn. W!); Assam, *Mann* 22 (syn. W!)”. During the revisionary studies of the genus *Eulophia* for *Flora of India*, we came across the following specimens of *Cyrtopera mannii* collected by G.Mann and examined by Reichenbach:

K 000078321, Upper Assam, June 1870, *Mann* 6 (K).

W 0047163, A colour sketch, labeled as Upper Assam, June 1869, *Mann* 12 (probably this drawing was made from the specimen *Mann* 12).

W 0047164, Upper Assam, June 1869, *Mann* 12 (W).

W 0047165, Khasi hills, Assam, 3-4000', Fl. June, *Mann* 337 (W).

W 0047166, Upper Assam, June 1870, *Mann* 22 (W).

W 0047167, Upper Assam, *Mann* 21 (W).

W 0047169, Khasia hills, *Mann* 337 (W).

W 1880000153, Khasi hills, Assam, 3-4000', *Mann* 337 (W).

The sheets 2 to 8 were determined as syntypes by J.Walter (W) during June 2013. In the protologue, H.G.Reichenbach has attributed a colour sketch from his friend for description of flower colour and referred to specimens from Upper Assam (“Obres Assam”) as the material for his description of this species. It is evident from the handwritings on the labels that all the above mentioned specimens have been referred to by Reichenbach while describing the species and belong to the type/original materials. The specimen *Mann* 12 [W 0047164] is presumably the source of the colour sketch (Fig. 1) referred to in the protologue; it was collected from “Upper Assam” as mentioned in the protologue and it characteristically represents the original description of the species. The same (Fig. 2) is thus designated here as the lectotype (as per Article 9.2 and 9.11 of McNeill *et al.*, 2012) of *Cyrtopera mannii*.

***Cyrtopera mannii* H.G. Reichenbach** in *Flora* 55: 274 (1872).

Types: Upper Assam, June 1869, *Mann* 12 [Lectotype, **designated here**: W (W 0047164), photo!]; Upper Assam, June 1870, *Mann* 6 [Syntype K (K000078321), photo!]; Upper Assam, June 1870, *Mann* 21, 22 [Syntypes W (W 0047166, W 0047167), photos!]

≡ *Eulophia manii* (H.G.Reichenbach) J.D.Hooker, *Flora of the British India* 6: 4 (1890); *Icones Plantarum* 22: t. 2115 (1894).

Distribution: INDIA (Assam, Manipur [*fide* Rao & Hajra, 1974], Meghalaya, Sikkim). Endemic.

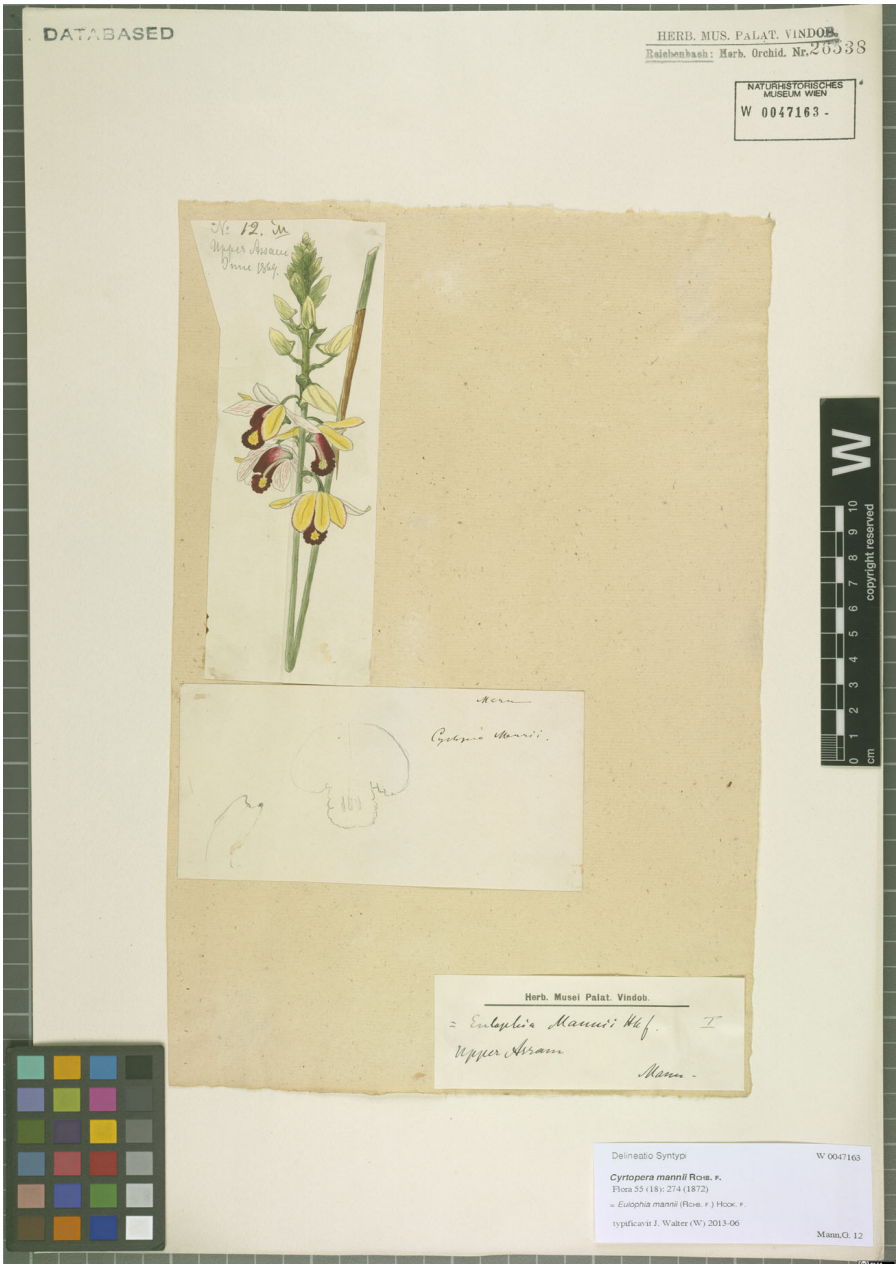


Fig. 1: The colour sketch of *Cyrtopera mannii* H.G. Reichenbach made from Mann 12 at W.



Fig. 2: Selected lectotype of *Cyrtopera mannii* H.G. Reichenbach
Copyright W (Naturhistorisches Museum Wien, Austria)

Additional specimens examined: India: Meghalaya, Khasi Hills, 3-4000 ft, June, *Mann* 337 (W 0047165; W 0047169; W 18800000153) - Photo!; *ibid* *Mann* 337 (DD!); Sikkim, tropical valleys, August 1899, *R. Pantling* 457 (CAL, DD); Assam, Kamrup, Manas Wild Life Sanctuary, 15.06.1974, *Hajra* 57799 (ASSAM).

Note: The specimens *Mann* 337 (W0047165, W0047169, W18800000153) were determined as syntypes by J.Walter (W). Although these specimens (collected from “Khasi hills”) were referred to by H.G.Reichenbach before describing the species and form the original material, they cannot be considered as type material since Reichenbach did not cite these specimens in the protologue and clearly indicated the specimens collected from “Upper Assam” (*Obres Assam*) as the source of his description of *Cyrtopera mannii*.

Acknowledgements

The authors are thankful to the Director Botanical Survey of India, Kolkata and Head of office Botanical Survey of India, NRC, Dehradun for facilities and encouragement. Thanks are also due to the authorities of DD, W and K for sharing the images of the type specimens.

References

- McNeill, J., F.R.Barrie, W.R.Buck, V.Demoulin, W.Greuter, D.L.Hawksworth, P.S.Herenden, S.Knapp, K.Marhold, J.Prado, W.F.Prud’homme Van Reine, G.F.Smith, J.H.Wiersema & N.J.Turland, 2012. *International Code of Nomenclature for algae, fungi, and plants (Melbourne Code)*, Adopted by the Eighteenth International Botanical Congress Melbourne, Australia, July 2011.
- Pearce, N.P. & P.J.Cribb, 2002. *The orchids of Bhutan*. Royal Botanic Garden, Edinburgh. pp. 1-643.
- Rao, A.S. & P.K.Hajra, 1974. *Eulophia mannii* Hook.f. – A scarcely known ground orchid from Assam. *Bulletin of Botanical Survey of India* 16 (1-4): 156-157.

1 : Botanical Survey of India, Northern Regional Centre, Dehradun- 248195, Uttarakhand, India.

2 : Botanical Survey of India, Sikkim Himalayan Regional Centre, Gangtok, India-737103.

* corresponding author: drdkbsi@gmail.com

3 : L.S.M. Government P.G. College, Pithoragarh- 262501, Uttarakhand, India