

Taxonomic note on *Phalaenopsis speciosa* (Orchidaceae) in Andaman & Nicobar Islands, India^a

J. Jayanthi^{1*}, K. Karthigeyan², R. Sumathi³ & J.S. Jalal¹

Keywords/Mots-clés : Andaman, Nicobar, Orchidaceae, *Phalaenopsis*, New Synonymy/nouvelle synonymie.

Abstract

Phalaenopsis speciosa is synonymised with *P. tetraspis* based on observation in the wild as well as study of specimens and scrutiny of the protologues and the relevant literature.

Résumé

Note taxinomique sur *Phalaenopsis speciosa* (Orchidaceae) sur les Îles Andaman et Nicobar (Inde) – *Phalaenopsis speciosa* est mis en synonymie de *P. tetraspis* sur la base d'observations dans la nature d'une part et, d'autre part, de l'étude de spécimens et de l'examen approfondi des protologues et de la littérature appropriée.

Introduction

Both *Phalaenopsis tetraspis* and *Phalaenopsis speciosa* were described on the basis of dried material by Heinrich Gustav Reichenbach, respectively in 1870 and 1881. Reichenbach distinguished these two species mainly based on leaves, roots and flower. He states that “the leaves in *P. tetraspis* are of a very dark green, and are of considerable thickness; in *P. speciosa* the leaves

^a : manuscrit reçu le 26 juillet 2014, accepté le 18 août 2014

article mis en ligne sur www.richardiana.com le 19/08/2014– pp. 242-246 - © Tropicalia

ISSN 1626-3596 (imp.) - 2262-9017 (élect.)

are much lighter in colour, having almost a yellow tinge [...], and the roots are less numerous and rather flat. [*P. speciosa*] is more floriferous than *P. tetraspis*, [the flowers] having large blotches and streaks of rosy-purple on a white ground, but scarcely any two plants are alike in their markings. Some flowers are much blotched with deep rosy-purple, showing very little white, others have bars of rosy-purple with some white spaces between." (Reichenbach, 1882; Higgins, 2013).

The difference between *P. speciosa* and *P. tetraspis* seems to be very negligible. The two species differ mainly by their flower colour, *P. tetraspis* having white flowers with pink stripes and *P. speciosa* having whitish-rose flowers with purple blotches.

The great similarity of these taxa has already been noticed by previous authors, such as Hooker (1895) – who states that "I have seen no flowers of this species [*P. tetraspis*] [...] As a species it is closely allied to *P. speciosa* [...] Its flowers vary much in colour and *P. tetraspis* may prove to be a form of it". Sweet (1980) – who recorded that *P. speciosa* is a highly variable species with regard to the flower colour and that it is closely similar to *P. tetraspis* – or Higgins (2013) – who states that he has "not seen specimens of both these species, but based on drawings reveals that both these species are certainly closely related, if not conspecific. If these two are the same species then *P. tetraspis* would be the correct name".

During the floristic inventorisation of the Campbell Bay National Park, in the Great Nicobar Biosphere Reserve, the authors collected in the year 2002 in the inland evergreen forests from Navy Dera towards Mt. Thullier, a *Phalaenopsis* that they identified as *P. tetraspis*. The flowers were observed to be waxy white with stripes of purplish-pink colour (Jayanthi *et al.*, 2003). The subsequent year, the same plant flowered again, but the colour of the flowers was observed to be magenta-pink with white margins (Figure 1).

On the basis of what we have delineated above, we are convinced that *Phalaenopsis speciosa* is to be regarded as a synonym of *Phalaenopsis tetraspis*.

***Phalaenopsis tetraspis* Reichenbach f.**

in *Xenia Orchidacea* 2 : 146 (1870)

P. speciosa var. *tetraspis* (Reichenbach f.) Sweet, in *American Orchid Society Bulletin*, 37 : 1092 (1968)

P. speciosa var. *maculata* Gower, *Garden* (London 1871-1927), 37 : 582 (1890)

P. sumatrana var. *alba* G.Wilson, *Orchid World*, 5 : 146 (1915) – according to WCSP (2014)



Fig. 1: *Phalaenopsis tetraspis*

A. Habit, B. & C. Flowers with pinkish blotch (02.03.2003), D. & E. Flowers with pinkish stripes (30.05.2002)

Phalaenopsis speciosa Reichenbach f., *Gardeners Chronicle*, n.s., 15 : 562 (1881)
Syn. Nov.

Distribution: INDIA: Great Nicobar Island, INDONESIA: Sumatra (Figure 2)

Specimen examined: GREAT NICOBAR, Navy Dera, 30.05.2002, J.Jayanthi 19380 (PBL!); East-West Road, 29.11.1975, P.Chakraborty 3212 (PBL!); Navy Dera, 16.05.1980, D.K.Hore 7289 (PBL!), Laful, 06.05.1980, D.K.Hore 7767 (PBL!); Laful forest, 10.05.1981, R.P.Dwivedi 8526 (PBL!).

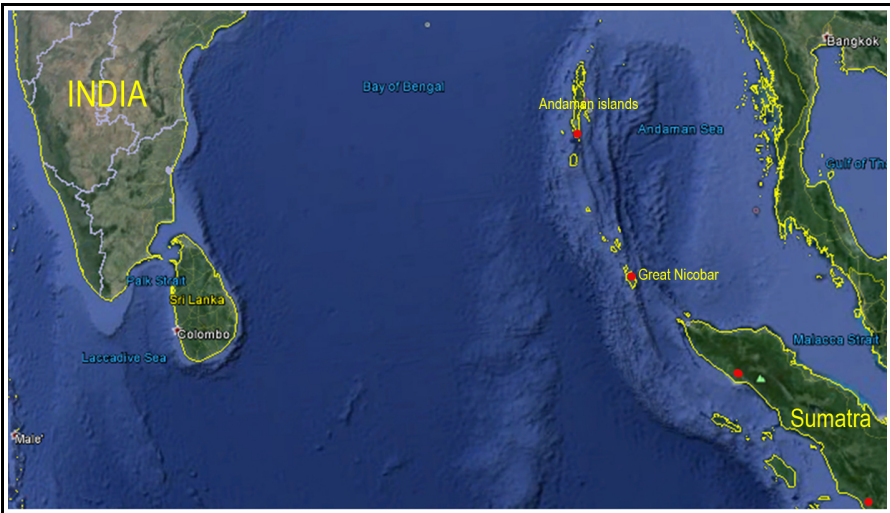


Fig. 2: Map showing the distribution of *Phalaenopsis tetraspis*
(Map source: Google Earth)

Acknowledgements

The authors are grateful to the Director, Botanical Survey of India for facilities and encouragement and the authorities of Forest Department, Andaman & Nicobar Islands for granting permission to explore the island.

References

- Higgins, W., 2013. *Phalaenopsis tetraspis* & *speciosa*. *Phalaenopsis*. [Vol. 23: 12-30.]
- Hooker, J.D., 1895. A century of Indian Orchids. *Annals of Royal Botanic Garden, Calcutta*. Vol. 5(1): 38.

Jayanthi, J., R. Sumathi, K. Karthigeyan & P.G. Diwakar, 2003. In search of *Phalaenopsis*. *ENVIS News letter, Botanical Survey of India* 9: 7.

Reichenbach, H.G., 1882. *The Gardeners' Chronicle*. ns, Vol. 18 : 745. Covent Garden, London.

Sweet, H.R., 1980. *The Genus Phalaenopsis*. The Orchid Digest, Inc. Day Printing Corp. Pomona.

WCSP, 2014. *World Checklist of Selected Plant Families*. Facilitated by the Royal Botanic Gardens, Kew. Published on the Internet; <http://apps.kew.org/wcsp/> Retrieved on 25/07/2014

1 : Botanical Survey of India, Western Regional Centre, Pune – 411 001, India

* author for correspondance: jayanthi.bsi@gmail.com

2 : Botanical Survey of India, Central National Herbarium, Howrah – 711 103, India

3 : Foundation for Revitalization of Local Health Traditions, Bangalore – 560 064, India