



New combinations in the genus *Vanda* (Orchidaceae)

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Abstract

A number of new combinations of names in subtribe Aeridinae are needed to bring species nomenclature for *Vanda* into alignment with recent phylogenetic analyses and a treatment to be published in a forthcoming volume of *Genera orchidacearum*. I present 17 name transfers from *Ascocentrum*, *Ascocentropsis*, *Christensonia*, *Eparmatostigma*, and *Neofinetia* to *Vanda* or indicate where there are existing epithets combined previously in *Vanda*.

Introduction

The taxonomic history of the genus *Vanda* is convoluted, and the genus has been described as a ‘taxonomic black hole’ requiring ‘a complete taxonomic revision’ (Christenson 1987). This taxonomic revision is in progress (Motes *et al.* unpubl.). *Vanda* Jones ex R.Br. (1820: 506) was first established in 1795 by William Jones, who based the concept on *Epidendrum tessellatum* Roxburgh (1795: 34), now known as *Vanda tessellata* (Roxb.) Hooker ex G.Don in J.C.Loudon (1830: 372), but the genus was not validly published until 1820 by Brown, using Jones’ concept. Lindley (1853) split the genus into five sections, and the basic concept of the genus remained broadly constant, with additional species being described in the genus during the 20th century. However, two of Lindley’s sections were removed from *Vanda* and erected as genera in their own right during this time, section *Fieldia* to *Vandopsis* Pfitzer in H.G.A.Engler & K.A.E.Prantl (1889: 210) and *Dimorphorchis* Rolfe (1919: 149), and section *Anota* to *Rhynchostylis* Blume (1825: 285). Since Lindley’s treatment of *Vanda*, opinion has differed on the position of several other small genera relative to *Vanda*, such as *Ascocentrum* Schlechter (1913: 975), *Euanthe* Schlechter (1914: 567), *Trudelia* Garay (1986: 73), and *Christensonia* Haager (1993: 40), and clarification of the generic status of *Vanda*, a number of the taxa within the genus and a more phylogenetically based classification of *Vanda* species have long been required.

While preparing treatments for genera in subtribe Aeridinae for volume VI of *Genera orchidacearum* (Pridgeon *et al.* in prep) and in light of recent phylogenetic analyses using DNA sequence data (Carlsward *et al.* 2006, Fan *et al.* 2009, Gardiner *et al.* in prep, Kocyan *et al.*, in prep, Kocyan *et al.* 2008, Padolina *et al.* 2005, Topik *et al.* 2005), it became apparent that new combinations would need to be made *Vanda*. Results of these analyses are compatible with inclusion of *Ascocentrum*, *Ascocentropsis* Senghas & Schildhauer (2000: 289), *Christensonia*, *Eparmatostigma* Garay (1972: 178), *Neofinetia* Hu (1925: 107) and *Trudelia* in *Vanda*; some are necessary to preserve monophyly of the (now enlarged) genus *Vanda* (e. g. *Ascocentrum*), whereas others are made on the basis of past treatments and ease of hybridisation with species of *Vanda* (e. g. *Neofinetia*).

Ascocentrum is a small genus of 13 species distributed from Nepal, China, through to Sulawesi and the Moluccas and was based on *Saccolabium miniatum* Lindley (1847: t26). The species are small multi-flowered taxa with a compact habit, and the flowers are bright orange, red, pink and purple, bearing short but narrow nectar-filled spurs. Monotypic *Euanthe* was based on *Esmeralda sanderiana* Reichenbach (1882: 588), which