

## New Combinations in *Haplopteris* (Adiantaceae) for the Flora of Peninsular Malaysia

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### Abstract

Two new combinations are made here: *Haplopteris hirta* (Fée) S.Linds. and *Haplopteris angustissima* (Holttum) S.Linds.

In preparation for the account of the Adiantaceae for the Flora of Peninsular Malaysia new combinations are necessary in the genus *Haplopteris* C.Presl. The family delimitation to be used in the Flora account is modified from Smith *et al.* (2006, 2008) who recognized a broadly delimited Pteridaceae but acknowledged that there are five monophyletic groups within the family that could be raised back to family level. The Adiantaceae, comprising *Adiantum* L. and all members of the former family Vittariaceae, is one of these monophyletic groups.

As so defined, the Adiantaceae in Peninsular Malaysia consists of the five genera *Adiantum* L., *Antrophyum* Kaulf., *Haplopteris* C.Presl, *Monogramma* Comm. ex Schkuhr., and *Vaginularia* Fée. The generic delimitation of the Vittarioid genera in the Flora account will largely follow Crane (1998). In this work it was shown that the Old and New World *Vittaria* species did not form a monophyletic group. All *Vittaria* species in Peninsular Malaysia (see Holttum, 1955) now belong in the genus *Haplopteris*. Crane (1998) and Zhang (2003) made most of the necessary name changes but two new combinations are still required.

***Haplopteris hirta*** (Fée) S.Linds. *comb. nov.*

**Basionym:** *Vittaria hirta* Fée, Mém. Foug. 10 (1865) 12. –**Type:** Wallace s.n., Borneo (holotype, BM).

***Haplopteris angustissima*** (Holttum) S.Linds., *comb. nov.*

**Basionym:** *Vittaria angustissima* Holttum, Gard. Bull. Singapore 11 (1947) 274. –**Type:** C.E. Carr s.n., Pahang. Fraser's Hill, alt. 4000 ft. March 1929 (holotype, SING).

### Acknowledgements

I thank the Forest Research Institute Malaysia (FRIM) for a visiting Fellowship to pursue research on Malaysian Adiantaceae. I also thank Serena Lee (SING) and Alison Paul (BM) for their help in locating type material.

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