

## A NEW NAME FOR A SOUTH ASIAN *XYLOPIA* (ANNONACEAE) SPECIES

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*Xylopia parvifolia* (Wight) Hook.f. & Thomson (Annonaceae), based on *Patonia parvifolia* Wight, is a tree species native to Sri Lanka and India. Unfortunately the widely used name is an illegitimate later homonym. *Xylopia patoniae* I.M.Turner is here proposed as an avowed substitute. There have been two proposals to lectotypify *Patonia* Wight. The earliest, and one to be followed, proposed *Patonia parvifolia* Wight as the lectotype, maintaining *Patonia* as a synonym of *Xylopia*. A later proposal to make *Patonia walkeri* Wight ( $\equiv$  *Diospyros walkeri* (Wight) Gürke) the type has to be disregarded.

*Keywords.* *Diospyros*, lectotype, *Patonia*, Robert Wight, Sri Lanka, *Xylopia*.

### INTRODUCTION

Robert Wight (1838) described the genus *Patonia* (Annonaceae) and included two species: *Patonia parvifolia* Wight and *P. walkeri* Wight, both known to Wight from single specimens from Ceylon (Sri Lanka) received from Colonel G. W. Walker. Wight's generic name honours Mrs Walker (née Paton). Hooker & Thomson (1855) recognised that *Patonia parvifolia* belonged in *Xylopia* L. and transferred it to that genus, noting that *Patonia walkeri* was a species of *Diospyros* L. (Ebenaceae). Subsequently, Hiern (1873) reduced *Patonia* to a section of *Diospyros*.

Unfortunately the generally used name for *Patonia parvifolia* in *Xylopia*, *X. parvifolia* (Wight) Hook.f. & Thomson, is a later homonym of a species from Brazil, *Xylopia parvifolia* Schltldl. In the absence of any synonyms a new name is required for the Asian *Xylopia parvifolia*. Given Wight's original intention of honouring Mrs Walker, I provide an avowed substitute for the name with an appropriate epithet. As Noltie (2005) noted, what has generally been considered the type of *Patonia parvifolia* in the Kew herbarium is not a specimen from Wight's personal herbarium, but instead came from that of William Hooker. No material from Wight's personal herbarium has been traced, but the citation of the Kew specimen as holotype by Huber (1985) is an effective lectotypification.

*Xylopia parvifolia* is a tree of lowland forests native to Sri Lanka and southern India (Huber, 1985) and is the only native species of *Xylopia* in India (Mitra, 1993).

A NOTE ON THE TYPIFICATION OF *PATONIA* WIGHT

Recently McNeill in Noltie (2005) selected *Patonia walkeri* as the lectotype of *Patonia*, in order that section *Patonia* was still available for use in *Diospyros*. However, McNeill did not realise that Van Setten & Maas (1990) had already designated *Patonia parvifolia* as the lectotype of *Patonia*, maintaining the identity of *Patonia* as a synonym of *Xylopia* in the Annonaceae. However, *Diospyros* section *Patonia* can be maintained if it is considered as newly described by Hiern (1873). The original publication contains no direct reference to *Patonia* Wight and Hiern's key to sections provides adequate description to validate the name. Hiern included 11 species in section *Patonia* and given his choice of name it is appropriate to lectotypify the section with *Patonia walkeri*. But as recent molecular analyses show little support for traditional infrageneric classifications of the genus (Duangjai *et al.*, 2006), Hiern's system of subdivision of *Diospyros* may be of little more than historical interest.

## NOMENCLATURE

**Xylopia** L., Syst. Nat. ed. 10, 1241, 1250, 1378 (1759). – Type: *Xylopia muricata* L.  
*Patonia* Wight, Ill. Ind. Bot. 1: 18 (1838), non *Pattonia* Wight (1852) [Orchidaceae].

– Type: *Patonia parvifolia* Wight (lectotype designated by Van Setten & Maas (1990: 677)).

**Xylopia patoniae** I.M.Turner, **nom. nov.** – *Patonia parvifolia* Wight, Ill. Ind. Bot. 1: 19 (1838). – *Xylopia parvifolia* (Wight) Hook.f. & Thomson, Fl. Ind. 125 (1855), non *X. parvifolia* Schtdl. (1834). – *Xylopicrum parvifolium* (Wight) Kuntze, Revis. Gen. Pl. 1: 8 (1891). – Type: Ceylon, *G.W. Walker* s.n. (lecto K [ex herb. Hook. (barcode no. K000574727)], designated by Huber (1985: 65)).

**Diospyros** section **Patonia** Hiern, Trans. Cambridge Philos. Soc. 12: 146, 152 (1873).  
– Type: *Patonia walkeri* Wight (lectotype designated here).

**Diospyros walkeri** (Wight) Gürke, Nat. Pflanzenfam. 4(1): 162 (1891). – *Patonia walkeri* Wight, Ill. Ind. Bot. 1: 19 (1838), as '*walkeri*'. – *Diospyros undulata* Wall. ex G.Don var. *walkeri* (Wight) Bakh., Bull. Jard. Bot. Buitenzorg ser. 3, 15(3): 281 (1938). – Type: Ceylon, *G.W. Walker* s.n. (holo K ex herb. R. Wight prop.).

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REFERENCES

- DUANGJAI, S., WALLNÖFER, B., SAMUEL, R., MUNZINGER, J. & CHASE, M. W. (2006). Generic delimitation and relationships in Ebenaceae *sensu lato*: evidence from six plastid DNA regions. *Amer. J. Bot.* 93: 1808–1827.
- HIERN, W. P. (1873). A monograph of Ebenaceae. *Trans. Cambridge Philos. Soc.* 12: 27–300.
- HOOKE, J. D. & THOMSON, T. (1855). *Flora Indica*. London: Pamplin.
- HUBER, H. (1985). Annonaceae. In: DASSANAYAKE, M. D. (ed.) *A Revised Handbook to the Flora of Ceylon*, vol. 5, pp. 1–75. Rotterdam: Balkema.
- MITRA, D. (1993). Annonaceae. In: SHARMA, B. D. & BALAKRISHNAN, N. P. (eds) *Flora of India*, vol. 1, pp. 202–307. Calcutta: Botanical Survey of India.
- NOLTIE, H. J. (2005). *The Botany of Robert Wight*. Ruggell: A. R. G. Gantner Verlag KG [Regnum Veg. vol. 145].
- VAN SETTEN, A. K. & MAAS, P. J. M. (1990). Studies in Annonaceae. XIV. Index to generic names of Annonaceae. *Taxon* 39: 675–690.
- WIGHT, R. (1838). *Illustrations of Indian Botany*, vol. 1, parts 1–7. Madras: J. P. Pharoah.

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