
A New Lectotypification for *Magnolia fistulosa* (Magnoliaceae)

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ABSTRACT. Based on the examination of the original material and protologue, the specimen *Balansa* 3884 (P) is designated as the lectotype of *Talauma fistulosa* Finet & Gagnepain, the basionym of *Magnolia fistulosa* (Finet & Gagnepain) Dandy, to supersede under Art. 9.17(b) of the ICBN the earlier designation by Chen and Nooteboom, *Bon* 3176. Two other names, *M. talaumoides* Dandy and *M. phanerophlebia* B. L. Chen, are referred to *M. fistulosa* as new synonyms.

Key words: China, *Magnolia*, Magnoliaceae, *Talauma*, Vietnam.

Finet and Gagnepain (1906) described a new species, *Talauma fistulosa* Finet & Gagnepain, based on three gatherings, two by Benedict Balansa and one by Père Bon from Tonkin, Vietnam. This species was transferred to *Magnolia* L. by Dandy (1928) as *M. fistulosa* (Finet & Gagnepain) Dandy. Chen and Nooteboom (1993) treated *M. fistulosa*, together with *M. paenetalauma* Dandy (1930), *M. talaumoides* Dandy (1930), *M. tenuicarpella* H. T. Chang (1961), and *M. odoratissima* Y. W. Law & R. Z. Zhou (1986), in synonymy under *M. championii* Bentham (1861) and designated *Bon* 3176 (at P), as the lectotype of *M. fistulosa*. Chen and Nooteboom (1993) argued that *M. championii* was quite variable in its habit, the shape and size of leaves, the dimensions of the flowers, and carpel numbers, and that these differences were related to geographic distribution. Careful examination of the *Magnolia* collections at IBSC, K, KUN, L, and P has led to the taxonomic opinion that *M. championii* sensu Chen and Nooteboom includes three totally different species concepts: (1) *M. fistulosa*, including *M. talaumoides*, (2) *M. odoratissima*, and (3) *M. championii*, encompassing *M. paenetalauma* and *M. tenuicarpella*.

The lectotype of *Talauma fistulosa*, *Bon* 3176, designated by Chen and Nooteboom (1993) matches the original description of *Magnolia odoratissima* (Law & Zhou, 1986), as well as the holotype of that name (R. Z. Zhou 0054, IBSC), in leaf blade shape and texture and in the venation and the slight

indument of the abaxial leaf blade surface. Nomenclatural confusion can be resolved and current taxonomic usage can be maintained by superseding Chen and Nooteboom's lectotype of *M. fistulosa* under Art. 9.17(b) of the ICBN (Greuter et al., 2000).

In the protologue of *Talauma fistulosa*, Finet and Gagnepain (1906) cited three syntype specimens from Tonkin, Vietnam: *Balansa* 3884 from "Phung-ham," *Balansa* 3885 from "mont. Bavi," and *Bon* 3176 from "montagnes et chemins" (without precise locality). After careful examination of these specimens, I found that the syntypes *Balansa* 3884 and *Balansa* 3885 are not conspecific with the lectotype designated by Chen and Nooteboom (1993), *Bon* 3176, which is itself in serious conflict with the protologue. This description (Finet & Gagnepain, 1906: 31) states "*Folia majuscula, glabra, coriacea, lanceolata, basi attenuata, apice cuspidata, supra±nitida, infra reticulata, venis prominentibus; infima petioli pars incrassata, fistulosa, transverse striata, pars suprema teretiuscula, duplo gracilior.*" The specimen *Bon* 3176 differs in having the petiole not hollow (vs. hollow in the description), pubescent and not striate (vs. glabrous and transversely striate); leaf blade abaxially slightly pubescent (vs. glabrous), with veins slightly prominent (vs. very prominent), and without (vs. with) reticulate venation; and leaf blade base rounded (vs. cuneate). In contrast, the specimens *Balansa* 3884 and *Balansa* 3885 correspond very well with the description for *T. fistulosa*. The flower of *Balansa* 3884 was dissected and illustrated by Finet and Gagnepain, and therefore *Balansa* 3884 (Fig. 1) is selected as lectotype.

***Magnolia fistulosa* (Finet & Gagnepain) Dandy, Notes**

Roy. Bot. Gard. Edinburgh 16: 124. 1928.

Basionym: *Talauma fistulosa* Finet & Gagnepain, Bull. Soc. Bot. France 52 (Mém. 4): 31. 1906.

Magnolia championii Bentham subsp. *fistulosa* (Finet & Gagnepain) J. Li, Acta Bot. Yunnan. 19: 133. 1997. TYPE: Vietnam. "Tonkin, Phung-ham, roches calcaire, près de la rive gauche de la Rivière-Noire," 2 May 1888 (fl), *B. Balansa* 3884 (lectotype, designated here, P).



Figure 1. Lectotype specimen of *Talauma fistulosa* Finet & Gagnepain: Balansa 3884 (P).

Magnolia talaumoides Dandy, J. Bot. 68: 208. 1930. Syn. nov. TYPE: Vietnam. Nha-trang: N of Ninh-hoa, SE flank of La Mère et l'Enfant Mts., 500 m, 16 May 1923 (fl), E. Poilane 6370 (holotype, P).

Magnolia phanerophlebia B. L. Chen, Acta Sci. Nat. Univ. Sunyatsevi 1988(1): 107. 1988. Syn. nov. TYPE: China. Yunnan: Maguan County, Gulinqing, 725 m, 4 Apr. 1987 (fl), B. L. Chen & C. N. Mai 87T001 (holotype, SYS; isotype, L).

KEY TO *MAGNOLIA FISTULOSA*, *M. ODORATISSIMA*, AND *M. CHAMPIONII*

1. Shrubs; leaves obovate, base cuneate, glabrous, reticulation very prominent abaxially; petioles hollowed, transversely striate; N Vietnam; China (SE Yunnan). *M. fistulosa*
- 1'. Shrubs or small trees; leaves usually elliptic, base rounded, more or less hairy abaxially; petioles solid, not striate.
 2. Buds, young branches, abaxial midribs and peduncles white villose; petals up to 5–6 × 2.5–3 cm; China (SE Yunnan, N Vietnam) *M. odoratissima*
 - 2'. Buds, young branches, abaxial midribs, and peduncles pale brown appressed-hairy; petals up to 2.5–4 × 1.5 cm; S & SE China, N Vietnam *M. championii*

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Literature Cited

- Bentham, G. 1861. Flora hongkongensis. Lovell Reeve, London.
- Chang, H. T. 1961. Notulae plantarum austro-sinicarum. Acta Sci. Nat. Univ. Sunyatsevi 1961(1): 53–56.
- Chen, B. L. & H. P. Nooteboom. 1993. Notes on Magnoliaceae III: The Magnoliaceae of China. Ann. Missouri Bot. Gard. 80: 999–1104.
- Dandy, J. E. 1928. New or noteworthy Chinese Magnoliaceae. Notes Roy. Bot. Gard. Edinburgh 16: 123–132.
- _____. 1930. New Magnolieae from China and Indochina. J. Bot. 68: 204–214.
- Finet, E. A. & F. Gagnepain. 1906. Contributions à la flore de l'Asie orientale d'après l'herbarier du muséum de Paris. Bull. Soc. Bot. France 52(Mém. 4): 23–54.
- Greuter, W., J. McNeill, F. R. Barrie, H. M. Burdet, V. Demoulin, T. S. Filgueiras, D. H. Nicolson, P. C. Silva, J. E. Skog, P. Trehane, N. J. Turland & D. L. Hawksworth (editors). 2000. International Code of Botanical Nomenclature (Saint Louis Code). Regnum Veg. 138.
- Law, Y. W. & R. Z. Zhou. 1986. A new species of Magnoliaceae from Guangtung [sic] and Yunnan, China. Bull. Bot. Res., Harbin 6(2): 139–142.