

A NEW SPECIES OF AND A NEW COMBINATION IN MAGNOLIA (MAGNOLIACEAE)

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SUMMARY

A new species of *Magnolia*, *M. citrata* is described from Thailand, and a new combination made from S China.

Key words: *Magnolia*, *Michelia*, Thailand.

INTRODUCTION

The first author, who is engaged in a survey of Magnoliaceae all over Thailand in the project of plant conservation under the initiation of H.R.H. Princess Maha Chakri Sirindhorn, has found several interesting trees including the species described here. He sent complete material to the second author for confirmation. *Magnolia citrata* belongs to subg. *Yulania* sect. *Michelia* subsect. *Michelia*.

The well-known *Michelia yunnanensis* from Yunnan still was not validly published as *Magnolia*, which is done here as *Magnolia laevifolia* (Y.W. Law & Y.F. Wu) Noot.

Magnolia citrata Noot. & Chalermglin, *spec. nov.* — Fig. 1; Map 1

Arbor monoecia sempervirens ramunculis glabris, crassis 5–7(–10) mm diametro conspicue lenticellatis, foliis distincte reticulatovenosis coriaceis glabris obovatis 20–25 cm longis 12–18 cm latis venis lateralibus 9–11 petiolo glabro 3–4 cm longo cicatrice absente. Brachyblastus glabrus 2.5–3.5 cm longus, 1–1.5 cm crassus, pedicello absente, bracteis 2–3 floribus bisexualibus tepalis 9 c. albis subsimilibus lanceolatis ad spatulatis 4–4.5 cm longis, 0.8–1.5 cm latis, staminibus 1.2–1.6 cm longis gynoecio excerto 1.6–2 cm longo carpellis glabris c. 11 fructibus 15–20 cm longis. — Typus: *Smitinand 90-269* = *Royal Forest Department 96932* (holo BKF), N Thailand, Chiang Mai Province, Mae Taeng District, Mon Anget.

Monoecious evergreen tree, 20–35 m high, 100–150 cm diam., bark 3–5 mm thick, lenticelled, with specific strong smell, many branches only at the top. *Twigs* stout, 5–7(–10) mm diam., seemingly glabrous but the youngest part minutely appressedly yellowish puberulous, conspicuously elliptic lenticellate and with annular scars. *Stipules* thinly coriaceous, margins yellowish puberulous, free from the petiole. *Leaves* obovate, 20–25 by 12–18 cm, coriaceous, rigidulous, deep green above, pale green beneath,

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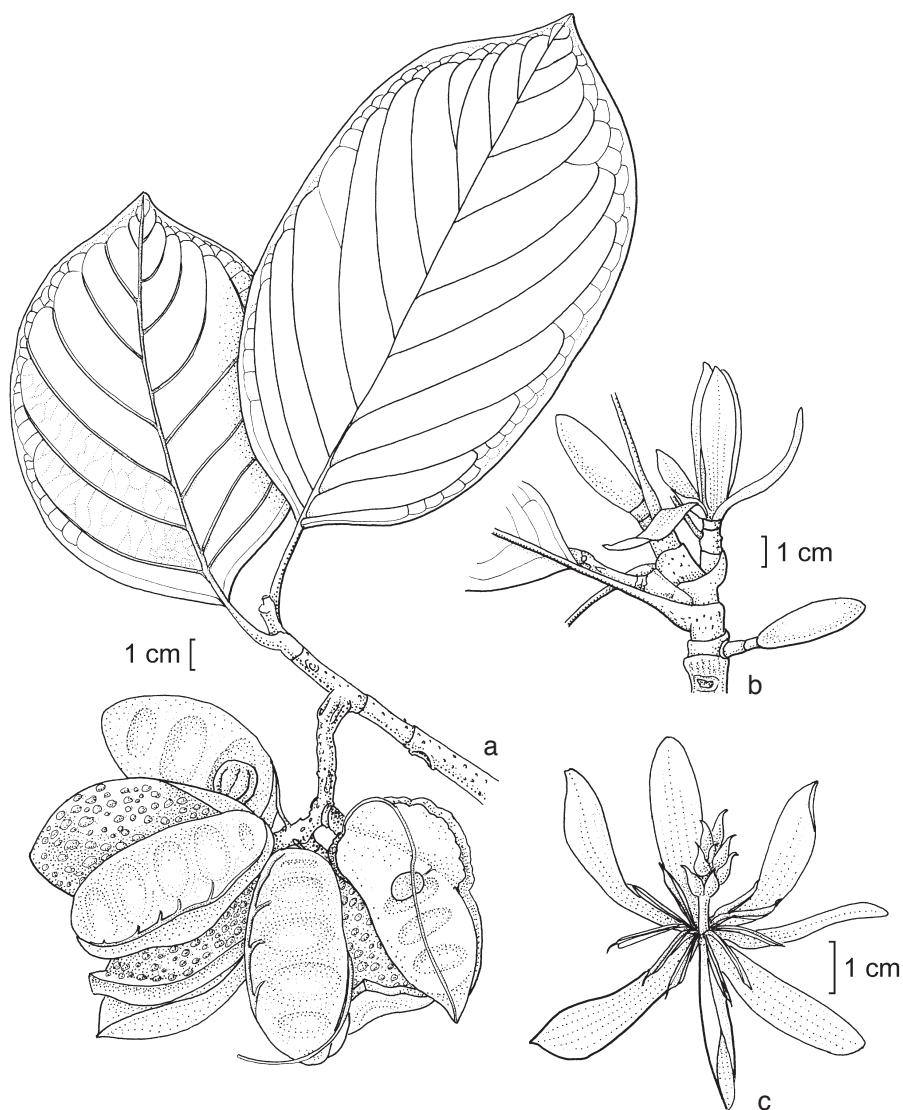


Fig. 1. *Magnolia citrata* Noot. & Chalermglin. a. Habit with ripening fruit; b. flower buds; c. flower (a: *Smitinand* 90-269; b, c: *P. Chalermglin* 420410).

glabrous on both sides, base rounded but narrowed near the petiole, margin entire, apex rounded, but the very top short-acuminate, midrib impressed above, prominent below, pairs of lateral nerves 9–11, impressed above, prominent below, meeting in an intramarginal vein 2–4 mm from the margin, reticulation distinct, densely netted on both sides. *Petiole* slender, 3–4 mm thick and 3–4 cm long, minutely yellowish appressedly puberulous, without stipular scars. *Brachyblast* minutely yellowish appressedly puberulous, 2.5–3.5 cm long and 1–1.5 cm thick, pedicel absent or minute,

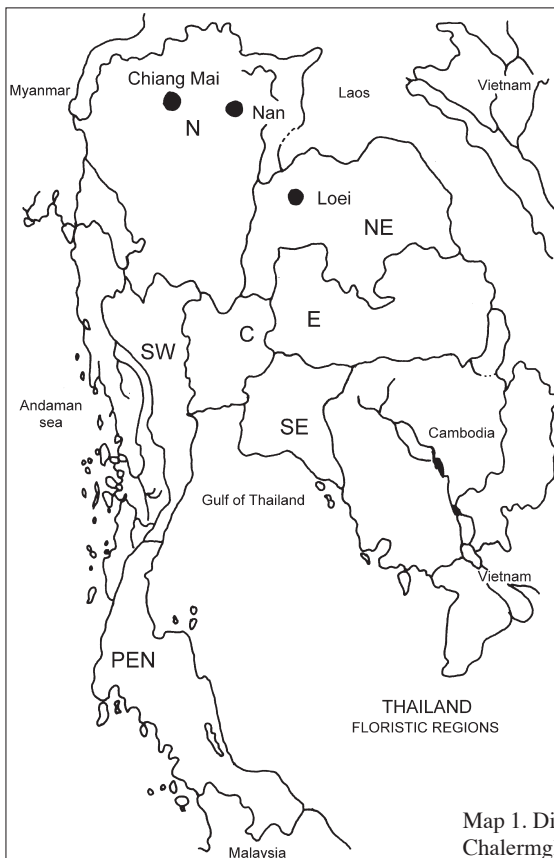
bracts 2 or 3, chartaceous. *Flower* bisexual, terminal on the axillary brachyblast, solitary, strongly fragrant, tepals 9, whitish, subsimilar, thick fleshy, narrowly obovate to spatulate, 4–4.5 by 0.8–1.5 cm; stamens 0.9–1.2 cm long, filament 2–3 mm, anthers 6–7 mm, connective appendage subulate, narrowly triangular, 1–1.5 mm; gynoecium 1.6–2 cm long, exerted from stamens; carpels c. 11, seemingly glabrous but minutely tomentulose, ovules c. 10. *Fruit* 15–20 cm long; ripe carpels 2–8, ovoid to ellipsoid, brown to dark brown, lenticellate, 5–7.5 by 3.5–5 cm, fruit wall 5–7 mm thick. *Seed* obovoid, 18 by 16 mm, 4–5 mm thick.

Distribution — Thailand, northern (Chiang Mai, Nan Province), north-eastern (Loei Province).

Habitat & Ecology — Hill evergreen forest (tropical rain forest). Altitude 1200–1400 m. Flowering: April to May; fruit ripening: September to October.

Notes — Local name: Champi Chang.

This species was for a long time misidentified as *M. lacei*, which it resembles. After comparing with the type of *Magnolia lacei* (W.W. Sm.) Figlar, *M. citrata* proved to be quite different in characters and size of outer tepals and fruits. The epithet *citrata* is because the very strong smell from the outer seed coat is the same as *Cymbopogon citrata* Stapf. The leaves, when crushed, have a liquorice smell.



Map 1. Distribution of *Magnolia citrata* Noot. & Chalermglin in N and NE Thailand.

Many collections were recently made: 1) *P. Chalermglin* 410618 from N Thailand, Mon Anget, Mae Taeng District, Chiang Mai Province, altitude 1200 m, 18 June 1998 (from the same tree as the type collection); 2) *P. Chalermglin* 4120409, 420410 from N Thailand, Doi Phuka National Park, Pua District, Nan Province, altitude 1400 m, 10 April 1999; 3) *P. Chalermglin* 460912, from NE Thailand, Phu Kradung National Park, Phu Kradung District, Loei Province, altitude 1300 m, 12 September 2003.

Note by the second author:

After reducing *Michelia* to *Magnolia* all the species were renamed, if necessary, in *Magnolia*. However, *Michelia yunnanensis* was incidentally renamed with an invalid and a superfluous name. The valid new combination is made here.

Magnolia laevifolia (Y.W. Law & Y.F. Wu) Noot., *comb. nov.*

Magnolia laevifolia (Y.W. Law & Y.F. Wu) Noot. — *Michelia laevifolia* Y.W. Law & Y.F. Wu (1988) 72.

Michelia dandyi Hu (1937) 34, non *Magnolia dandyi* Gagnep. (1939) 63.

Michelia yunnanensis Franch. ex Finet et Gagnep. (1906) 43, non *Magnolia yunnanensis* Noot. (1985) 88.

Magnolia dianica Sima & Figlar (2001) 30.

Note — *Magnolia laevifolia* (Y.W. Law & Y.F. Wu) Figlar, *comb. nov.* (2000) was published without full reference to the basionym, and is therefore invalid and illegitimate. See ICBN art. 33.3. A new combination, or an avowed substitute (replacement name, nomen novum), published on or after 1 January 1953 based on a previously and validly published name is not validly published unless its basionym (name-bringing or epithet-bringing synonym) or the replaced synonym (when a new name is proposed) is clearly indicated and a full and direct reference given to its author and place of valid publication, with page or plate reference and date.

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REFERENCES

- Finet, E.A. & F. Gagnepain. 1906. Espèces nouvelles de l'Asie orientale. Bull. Soc. Bot. France 52, Mém. 4, 1: 43.
- Gagnepain, F. 1939. Magnoliacées nouvelles. Notul. Syst. 8: 63–66.
- Hu, H.H. 1937. Notulae systematicae ad Floram Sinensium VIII. Bull. Fan Mem. Inst. Biol. Bot. 8: 34.
- Law, Y.W. & Y.F. Wu. 1988. Materials for Chinese Magnoliaceae. Bull. Bot. Res. North-East Forest. Inst. 8: 72.
- Nooteboom, H.P. 1985. Notes on Magnoliaceae. Blumea 31: 88.
- Sima, Y.K. & R.B. Figlar. 2001. Some notes on *Magnolia* subgenus *Michelia* from China. Yunnan Forest Sci. Technol. 2: 30.