

Article

Reinstatement of Synonymised Magnoliaceae Taxa and Their Transfer to *Magnolia*

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Abstract

Three new names are proposed and three new combinations are formally made to transfer six taxa endemic to SE Yunnan, China, from the segregate genera of *Manglietia* and *Michelia* to *Magnolia*, now widely recognised as the remaining genus in the subfamily Magnolioideae of Magnoliaceae. These taxa are *Manglietia tenuifolia*, *Michelia balansae* var. *brevipes*, *M. brachyandra*, *M. chartacea*, *M. nitida* and *M. oblongifolia*, which are reinstated from synonymy on the basis of extensive comparative data confirming them as the unique taxa originally described and named in the 1980s. The necessary replacement names *Magnolia cheniana*, *M. gulinqingensis* and *M. valderi* are proposed for *Michelia nitida*, *M. oblongifolia* and *Manglietia tenuifolia* respectively, which would otherwise produce later illegitimate homonyms to the existing names *Magnolia nitida*, *M. oblongifolia* and the existing fossil name *M. tenuifolia*, respectively. The remaining three taxa retain their specific epithets when transferred as new combinations to *Magnolia*. Notes and recommendations on the conservation of each of the six taxa are presented, since they have not been independently evaluated in the wild for more than three decades as a result of being reduced to synonyms of more widespread taxa, despite having an average of ten diagnostic features distinguishing them from these earlier-named taxa.

Keywords: ICN Madrid Code; new names; new combinations; reinstated Magnoliaceae taxa

1. Introduction

Undertaking research for a future publication concerning the Magnoliaceae of China, the Chinese botanist and plant taxonomist Chen Bao-liang came to Europe in 1990 to study wood anatomy and type specimens of Magnoliaceae taxa [1] that had been collected for more than three centuries in his country by European explorers and botanists and were lodged in Europe's many historical herbaria. At the Rijksherbarium in Leiden, the Netherlands, he encountered the Dutch botanist and plant taxonomist Hans Peter Nooteboom, the successor of Britain's James E. Dandy, the world's foremost authority on the Magnoliaceae family. Together they undertook research on Chinese Magnoliaceae until Chen returned to China in May 1991, taking his research notes with him with the intention of publishing his magnolia research in China once it was finalised. This never eventuated, due to Chen dying from cancer [2] in September 1991. Meanwhile, back in the Netherlands, Nooteboom continued on his own researching the Magnoliaceae of China, which was eventually published in November 1993 [2], two years after the death of the listed lead author Chen Bao-liang, who had been the initiator of this research.

In the 1993 paper, Nooteboom subsumed 10 out of 15 Magnoliaceae taxa that Chen and his co-authors had named, described and published following peer review little more



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than five years previously. These new taxa were predominantly based on type specimens collected in the wild by Chen and/or his botanical colleagues, plus Chen or his colleagues' personal observations of these taxa in their wild environmental state. Nooteboom's justification for synonymising five of the taxa dealt with in this paper is summarised in Table 1. Numerous other Magnoliaceae taxa named by various authors and subsequently synonymised by Nooteboom have also been reinstated in our other research papers [3,4]. This synonymisation has been done without consideration of the potential and increasingly apparent negative consequences on their survival in nature, as is the case for *Michelia magnifica*, which two recent botanical expeditions could no longer find in its last known location in the wild, plus DNA being attributed to the wrong species [3].

Based on comparative morphological diagnostic data, Chen's synonymised taxa are herein reinstated and transferred to *Magnolia*, which a phylogenetic analysis confirmed to be the sole remaining genus of the subfamily Magnolioideae in the flowering plant family Magnoliaceae [5]. Three of the reinstated taxa require new names under the rules of the International Code of Nomenclature for algae, fungi, and plants (The Madrid Code) of 2025 [6].

2. Materials and Methods

The materials utilised in this study are the peer-reviewed botanical literature in which the taxa under consideration were previously described and named by Chen Bao-liang or with his co-authors during 1987 and 1988. These were in accordance with the requirements of the International Code of Botanical Nomenclature (ICBN) in place during those years, namely the Sydney Code effective from 1981 to 1987 [7] and the Berlin Code effective from 1987 to 1994 [8]. Other published studies obtained from Australian and overseas institutional libraries, or accessible on the internet, was researched for the purpose of determining the synonymised records of the taxa dealt with in this paper, the comparative features of these taxa, and where available, their conservation status. Much of the Asian literature required translation to determine if it contained information relevant to this research and all of the cited literature is listed in the References. The known morphological and phenological features are compiled in the individual comparative tables, with a minimum of 4 and a maximum of 22 non-overlapping diagnostic features highlighted in the tables to confirm the authenticity of Chen and/or his co-authors' synonymised taxa and hence justifying their reinstatement. The Chinese Virtual Herbarium [9] was searched for images of relevant Chinese-type and non-type specimens uploaded by participating Chinese herbaria. Those located, plus other sighted images of type specimens that were requested and received from various herbaria, are indicated in the taxonomic section by an exclamation mark (!) after either the herbarium acronym or the barcode of the individual specimens, with n.v. indicating those specimens not seen. These barcodes are prefixed with the following acronyms, indicating the herbaria where the specimens are deposited: IBSC, NHN/L, PE, SYS, and YCP. The names of the herbaria that are represented by the above-listed acronyms are compiled in Appendix A, the final table of this paper.

The new names and new combinations proposed in this paper are made in compliance with the rules and recommendations of the 2025 International Code of Nomenclature for algae, fungi and plants (ICN), known as The Madrid Code [6], as cited in this paper under the relevant taxa.

3. Results and Discussion

Ongoing research by the authors has resulted in the reinstatement and transfer to *Magnolia* of the following six Chinese taxa occurring in southeastern Yunnan: *Manglietia tenuifolia* Hung T. Chang & B.L. Chen, *Michelia nitida* B.L. Chen, *M. oblongifolia* Hung T.

Chang & B.L. Chen, *M. balansae* var. *brevipes* B.L. Chen, *M. brachyandra* B.L. Chen & S.C. Yang, and *M. chartacea* B.L. Chen & S.C. Yang. Each of the above six taxa were reduced as heterotypic synonyms by Hans P. Nootboom in 1993 [2], with the five above species summarised in Table 1.

Table 1. Record of synonymy of five Magnoliaceae species from Yunnan, China, named and described by Chen Bao-liang or with co-authors in 1987 and 1988.

Species Name, Author(s), Reference Information	Species Synonymised Under by Nootboom in 1993	Reason for Synonymy by Nootboom in 1993 [2]	Number of Distinguishing Features Invalidating Synonymy
<i>Michelia nitida</i> B.L. Chen (in Chen 1988 [10]) Note: Chen died in 1991	<i>Michelia chapensis</i> Dandy	“Essentially the same but the gynoecium of <i>Michelia nitida</i> is slightly exerted from instead of hidden within the androecium”	14—see Table 2
<i>Michelia oblongifolia</i> Hung T. Chang & B.L. Chen (in Chen 1987 [11])	<i>Michelia aenea</i> Dandy	“The specimens examined are quite uniform in all characters”	11—see Table 4
<i>Manglietia tenuifolia</i> Hung T. Chang & B.L. Chen (in Chen 1988 [10])	<i>Manglietia insignis</i> (Wall). Blume	“ <i>Manglietia insignis</i> is a very widespread species. It therefore displays many variations in shape and size of the leaves as well as size and colour of the flowers throughout the area of distribution”	7—see Table 6 (NB: above number does not include shape of leaves or size and colour of flowers!)
<i>Michelia brachyandra</i> B.L. Chen & S.C. Yang (in Chen & Yang 1988 [12])	<i>Michelia chapensis</i> Dandy	“Essentially the same but gynoecium of <i>Michelia brachyandra</i> is slightly exerted from instead of hidden within the androecium”	10—see Table 9
<i>Michelia chartacea</i> B.L. Chen & S.C. Yang (in Chen & Yang 1988 [12])	<i>Michelia chapensis</i> Dandy	“Essentially the same as <i>Michelia chapensis</i> ”	7—see Table 10

The reinstated species *Manglietia tenuifolia* is transferred to *Magnolia* with the proposed replacement name *Magnolia valderi* C.B. Callaghan & S.K. Png, because its transfer to *Magnolia* without a change of name would create a later illegitimate homonym to the fossil taxon *Magnolia tenuifolia* Lesq. of 1868 [13]. The replacement name *Magnolia cheniana* C.B. Callaghan & S.K. Png is proposed for the reinstated *Michelia nitida*, because when transferred to *Magnolia*, its existing epithet would create a later illegitimate homonym to the existing *Magnolia nitida* W.W. Smith of 1920 [14]. Also, the replacement name *Magnolia gulinqingensis* C.B. Callaghan & S.K. Png is proposed for the reinstated *Michelia oblongifolia*, since transferral to *Magnolia* with its existing epithet would create a later illegitimate homonym to the existing *Magnolia oblongifolia* (León) Palmerola of 2016 [15]. The final three reinstated taxa retain their existing epithets when transferred as new combinations to *Magnolia*.

4. Taxonomic Section

4.1. Three New Names Proposed in *Magnolia*

Magnolia cheniana C.B. Callaghan & S.K. Png, nom. nov.

Replaced synonym: *Michelia nitida* B.L. Chen, Acta Scientiarum Naturalium Universitatis Sunyatseni 1988(1): 111 (Chen 1988 [10])—non *Michelia nitida* (Miq.) Kuntze, Revisio Generum Plantarum 1: 241 (Kuntze 1891 [16]) [=Barringtonia acutangula subsp. acutangula]—non *Magnolia nitida* W.W. Sm., Notes from the Royal Botanic Garden, Edinburgh 12(59): 212 (Smith 1920 [14]).

Michelia chapensis Dandy, in Annals of the Missouri Botanical Garden 80(4): 1079; 1081 (Chen & Nooteboom 1993 [2]); World Checklist and Bibliography of Magnoliaceae 55 (Frodin & Govaerts 1996 [17]); and Flora Yunnanica. Tomus 6 (Spermatophyta): 48 (Wu & Chen 2006 [18]), each p.p. quoad syn. *Michelia nitida* B.L. Chen.

Magnolia coriacea (Hung T. Chang & B.L. Chen) Figlar, in Proceedings of the International Symposium on the Family Magnoliaceae 21 (Figlar 2000 [19]) and Yunnan Forestry Science and Technology 2001(2): 30 (Sima 2001 [20]), both p.p. quoad syn. *Michelia nitida* B.L. Chen.

Michelia coriacea Hung T. Chang & B.L. Chen, in Flora of China Vol. 7: 86 (Xia et al. 2008 [21]); Vouchered Flora of Southeast Yunnan, Vol. 1: 52 (Sima & Lu 2009 [22]); and A Taxonomic Revision of the Magnoliaceae from China: 244 (Sima 2011 [23]), each p.p. quoad syn. *Michelia nitida* B.L. Chen.

Chinese names: 畴阳含笑 meaning “Chouyang michelia”, probably for the Chouyang River in Xichou County, southeast Yunnan. Also: 西畴含笑 meaning “Xichou michelia”.

Proposed new Chinese name: 陈宝樑木兰 meaning “Chen Bao-liang’s magnolia”.

Type: CHINA—Yunnan Province • Sichou [= Xichou] County, alt. 1400 m, small area, sunny southeastern slope, 9 April 1987, fr, Chen Bao-liang & Mai Chi-nan 87T-033. Holotype: SYS 00051184! isotypes SYS 00095560! SYS 00095561! SYS 00095562!

Paratype: CHINA—Yunnan Province • Xichou County, Xinjie, Longshuchong, alt. 1300 m, October 1986, Chen Bao-liang & Yang Shao-cheng 86s-533. SYS 00051185 n.v.

Specimen images below accessed on 20 March 2019; reaccessed with new URLs on 22 October 2022:

Holotype (SYS): <https://www.cvh.ac.cn/spms/detail.php?id=7bb3270e> (accessed on 23 September 2026).

Isotype (SYS): <https://www.cvh.ac.cn/spms/detail.php?id=08f41524> (accessed on 23 September 2026).

Isotype (SYS): <https://www.cvh.ac.cn/spms/detail.php?id=08f41710> (accessed on 23 September 2026).

Isotype (SYS): <https://www.cvh.ac.cn/spms/detail.php?id=7bb3270e> (accessed on 23 September 2026).

Paratype (SYS): specimen image not uploaded to CVH at 2 July 2026.

Additional material: CHINA—Yunnan Province • alt. 1309 m, 8 August 1987, B.L. Chen 87F-253. SYS 00095563 n.v. • alt. 1300 m, 8 August 1987, S.C. Yang 1. SYS 00051183 n.v. • alt. 1400 m, September 1987, Li Da-xiao 8804. IBSC 0085982 n.v. • September 1987, D.X. Li 87912. IBSC 0117474 n.v. Specimen images not uploaded to CVH at 2 July 2026.

Note 1: The distinguishing diagnostic features highlighted in bold in Tables 2 and 3 indicate *Michelia nitida* to be an independent genuine species to *M. chapensis* and *M. coriacea*, under which it was placed in synonymy by the previously listed authors. It is consequently reinstated and transferred to *Magnolia* with a necessary new name. The replacement name *Magnolia cheniana*, in honour of Dr. Chen Bao-liang, is proposed for *Michelia nitida*, since its epithet is previously occupied by *Magnolia nitida* W.W. Sm. of 1920 [14] and therefore its transfer to *Magnolia* without a name change would create a later illegitimate homonym according to ICN Art. 53.1 [6].

Table 2. The 26 presently known comparative features between *Michelia nitida* B.L. Chen and *Michelia chapensis* Dandy, with 14 distinguishing diagnostic features highlighted (in bold).

Plant Feature	<i>Michelia nitida</i>	<i>Michelia chapensis</i>
life form	medium-sized tree to 20 m	large tree to 30 m ^d
colour of young twigs	green with silvery puberuli	brown ^b
* leaf shape	obovate–oblong or obovate–elliptic with unequal sides	obovate or elliptic–oblong (obovate, narrowly obovate or oblong–obovate ^d)
leaf dimensions	14–16 × 4–4.5 cm	6.5–15 × 3.5–6.5 cm ^d
leaf apex	very obtuse or sharply acute	acuminate or subacuminate (abruptly narrow short-acuminate or short-acuminate with obtuse mucro ^d)
lateral leaf vein pairs	13–15	9–12 (–15) ^c
* reticulate veins	conspicuous both sides	not conspicuous beneath ^a (sparse ^c)
petiole length	ca. 1 cm	1.5–2.5 cm ^c
petiole indumentum	initially entirely pubescent	initially minutely pubescent only at base
flower bud bract number	3	3–4
flower bud bract indumentum	externally densely pubescent	externally tomentellus or puberulus (i.e., finely pubescent)
tepal colour	fleshy white	pale yellow ^d
tepal shape	narrowly obovate	3 exterior tepals oblanceolate–oblong (obovate–elliptic ^d)
tepal dimensions	1.6–2 × 0.6–1 cm	ca. 3–3.5 cm long (ca. 3 × 1.5 cm ^d)
gynoecium shape	narrowly ovate	narrowly cylindrical
* gynoecium indumentum	glabrous	tomentellus
* gynophore indumentum	glabrous	densely silver–grey appressed puberulent ^d
ovules per carpel	ca. 10	6–8 (6 ^c)
gynophore length in fruit	1.8–2.1 cm	ca. 0.8–1.2 cm ^b
fruit aggregate length	4 cm	ca. 10 cm ^d
mature carpel shape	ovate or obovate	oblong or oval ^c
mature carpel dimensions	2.1–2.3 × 1.4–1.7 cm	1–1.5 × ca. 1 cm ^c
flowering period	February–March	March–April ^{d,e}
fruiting period	August–September	November ^{d,e}
altitudinal range	1300–1400 m	500–1500 m ^d
distribution	Xichou County, SE Yunnan	S. Jiangxi, W. Hunan, N. Guangdong, NE and SE Guangxi, N. Vietnam ^c

Note: The listed features of *Michelia nitida* are from [10], Chen (1988: 111), with an asterisk (*) indicating those five features referenced in Chen's taxonomic diagnosis. The features of *Michelia chapensis* are from [24], Dandy (1929: 223), supplemented by [10], Chen (1988: 111) ^a; [2], Chen & Nooteboom (1993: 1081) ^b; [25], Law et al. (1996: 170) ^c; [26], Liu et al. (2004: 232) ^d; and [27]: Xing et al. (2009: 202) ^e.

Table 3. The 21 presently known comparative features between *Michelia nitida* B.L. Chen and *Michelia coriacea* Hung T. Chang & B.L. Chen, with 10 distinguishing diagnostic features highlighted (in bold).

Plant Feature	<i>Michelia nitida</i>	<i>Michelia coriacea</i>
life form	medium-sized tree to 20 m	small tree to 10 m
trunk diameter	to 100 cm	to 20 cm
colour of young twigs	green with silvery puberuli	black with dense or parted white puberuli
leaf shape	obovate–oblong or obovate–elliptic with unequal sides	ovate, elliptic or obovate–elliptic, with undulating margins
leaf dimensions	14–16 × 4–4.5 cm	12.5–14 × 2–3.5 cm
leaf apex	very obtuse or sharply acute	acute or acuminate
petiole length	ca. 1 cm	1.8–2.3 cm
petiole indumentum	initially pubescent	glabrous
tepal number	6	9^a
tepal shape	narrowly obovate	lanceolate^b
gynoecium shape	narrowly ovate	subcylindric^a
gynophore length	6 mm	15–18 mm
immature carpels	23–28	7–13
gynophore length in fruit	1.8–2.1 cm	1.2–1.5 cm^a
fruit aggregate length	4 cm	to 6 cm^a
mature carpel shape	ovate or obovate	ovoid
mature carpel dimensions	2.1–2.3 × 1.4–1.7 cm	2–2.2 × ca. 1.1–1.6 cm
seeds per carpel	1–2	1
flowering period	February–March	March–April ^b
fruiting period	August–September	November ^b
altitudinal range	1300–1400 m	1450–1700 m ^b

Note: The listed features of *Michelia nitida* are cited from [10], Chen (1988: 111), with those of *Michelia coriacea* from [11], Chen (1987: 89), who record the flowers as then unknown, supplemented by [2], Chen & Nooteboom (1993: 1063), ^a and [26], Liu et al. (2004: 238) ^b.

Note 2: Figure 16 in Chen & Nooteboom (1993: 1080 [2]) is captioned as a fruiting branch of *Michelia chapensis* “based on SYS 161739 = *Chen Bao Liang* 87 T 033”. This specimen number represents the holotype and three isotype specimens of *Michelia nitida* deposited at SYS. None of the images of these type specimens (which may be downloaded from the URLs listed previously) show their numerous leaves folded upwards, or any flower buds or mature leaf buds or mature carpels as shown in Figure 16. Also, none of the original barcodes stamped on the four type specimen sheets of *Michelia nitida* are SYS 161739 as noted at their Figure 16.

Conservation status: Using IUCN criteria [28,29], Chinese authorities determined *Michelia coriacea*, under which *Michelia nitida* was previously sunk in synonymy, as Endangered, EN B2ab (ii,iii) [30] (p. 328), but this assessment has since been downgraded to Vulnerable, VU A2acd; B1ab (i,iii,v) [31] (p. 725). Based on a 20 April 2007 assessment by the Global Tree Specialist Group, the conservation status of *Magnolia coriacea* is listed for the IUCN Red List of Threatened Species [32] as “Endangered B1 ab (iii,v) with a decreasing population trend” from field surveys in December 2005 estimating “that there are about 300–500 scattered individuals remaining, mainly outside nature reserves” in China and Vietnam, with most of these resprouting from cut-down trees! (see also [33]). In view

of the above assessments, it is surprising to find in the recently published book *Conservation and Reintroduction of Rare and Endangered Plants in China* [34] (p. 86) that, in Table 1, in the column headed “Endangered sp. listing (IUCN or China)”, it states that there are “none” (no listings) for *Michelia coriacea* at No. 125.

Recommendation: Since *Michelia nitida* has been recorded as synonymous under *M. coriacea* in *Flora of China* and by the other authors listed previously, and is known to occur only in Xichou County, Yunnan, it would be at least as endangered as *M. coriacea*, and possibly critically endangered. Therefore, an evaluation of the current situation in the wild of *Michelia nitida* under the proposed new name of *Magnolia cheniana* should be undertaken by Chinese researchers or by representatives of the IUCN without undue delay!

***Magnolia gulinqingensis* C.B. Callaghan & S.K. Png, nom. nov.**

Replaced synonym: *Michelia oblongifolia* Hung T. Chang & B.L. Chen, Acta Scientiarum Naturalium Universitatis Sunyatseni 1987(3): 86–87 (Chen 1987 [11])—non *Magnolia oblongifolia* (León) Palmarola, Revista del Jardín Botánico Nacional 37: 3, 8 Figure 5 (Palmarola et al. 2016 [15]).

Michelia aenea Dandy, in Annals of Missouri Botanical Garden 80(4): 1057 (Chen & Nooteboom 1993 [2]), p.p. quoad syn. *Michelia oblongifolia* Hung T. Chang & B.L. Chen and also specimen B.L. Chen GS86-187—World Checklist and Bibliography of Magnoliaceae: 54 (Frodin & Govaerts 1996 [17]), Vouchered Flora of Southeast Yunnan, Vol. 1: 45 (Sima & Lu 2009 [22]) and A Taxonomic Revision of the Magnoliaceae from China: 226 (Sima 2011 [23]), each p.p. quoad syn. *Michelia oblongifolia* Hung T. Chang & B.L. Chen.

Michelia foveolata Merr. ex Dandy, in Acta Botanica Yunnanica 19(2): 134 (Li 1997 [35]), Flora Yunnanica Tomus 6 (Spermatophyta): 53 (Wu & Chen 2006 [18]), and Flora of China Vol. 7: 86 (Xia et al. 2008 [21]), each p.p. quoad syn. *Michelia oblongifolia* Hung T. Chang & B.L. Chen.

Magnolia foveolata (Merr. ex Dandy) Figlar, in Proceedings of the International Symposium on the Family Magnoliaceae: 22 (Figlar 2000 [19]), Yunnan Forestry Science and Technology 2001(2): 32 (Sima 2001 [20]) and Kew Plants of the World Online (2026 [36]), each p.p. quoad syn. *Michelia oblongifolia* Hung T. Chang & B.L. Chen.

Chinese name: 矩叶含笑 meaning “rectangular-leaved michelia”.

Proposed new Chinese name: 古林箐木兰 meaning “Gulinqing magnolia”.

Type: CHINA—Yunnan Province • Maguan County, Gulinqing, Xiaoqiwan, alt. 1950 m, hilltop, shaded forest area, 16 m tree, 10 October 1986, fr, Chen Bao-liang 86S-193. Holotype: SYS 00095566! isotype: NHN/L 0397508!

Paratypes: CHINA—Yunnan Province • Maguan County, Jiulian Shan, alt. ca. 1790 m, 15 April 1986, fr, Chen Bao-liang & S.C. Yang GS86-187. SYS 00095565! SYS 00051186 n.v. **ibid.** • alt. 1820 m, 4 April 1986, B.L. Chen GS86-189. SYS 00051187 n.v.

Additional material: CHINA—Yunnan Province • **ibid.**, alt. 1760 m, 4 April 1986, Chen Bao-liang GS86-002. SYS 00095567 n.v.

Specimen images below accessed on 20 March 2019; both CVH reaccessed with new URLs on 11 October 2022:

Holotype (SYS): <https://www.cvh.ac.cn/spms/detail.php?id=08f418c2> (accessed on 23 September 2026).

Isotype (NHN/L): http://medialib.naturalis.nl/file/id/L0397508_MLN/format/large?dpi=1 (accessed on 23 September 2026).

Paratype (SYS): <https://www.cvh.ac.cn/spms/detail.php?id=08f417f6> (accessed on 23 September 2026).

Note: The distinguishing diagnostic features highlighted in bold in Tables 4 and 5 indicate *Michelia oblongifolia* to be an independent genuine species to *M. aenea* and *M. foveolata*, under which it was placed in synonymy by the previously listed authors. It is there-

fore reinstated and transferred to *Magnolia* with the proposed replacement name *Magnolia gulinqingensis* because its transfer to *Magnolia* without a name change would create a later illegitimate homonym under ICN Art. 53.1 [6], conflicting with the previous validly published *Magnolia oblongifolia* (Leon) Palmerola from eastern Cuba, which resulted from the transfer of *Talauma oblongifolia* Leon to *Magnolia* [15]. *Magnolia gulinqingensis* is named for the remote southwest region of Gulinqing, Maguan County, Yunnan, where the type specimens were collected.

Table 4. The 22 presently known comparative features between *Michelia oblongifolia* Hung T. Chang & B.L. Chen and *Michelia aenea* Dandy, with 11 distinguishing diagnostic features highlighted (in bold).

	<i>Michelia oblongifolia</i>	<i>Michelia aenea</i>
tree height	ca. 16 m	12 m (Poilane's note on holotype sheet)
bud indumentum	copper-coloured	reddish brown-coloured ^a
leaf shape	obovate–oblong, narrowly oblong or oblanceolate	elliptic–oblong or narrowly oblong
leaf dimensions	to 25 × 7.5 cm	to 28 × 9.5 cm (26 × 8 cm ^a)
leaf apex	acuminate or acutely obtuse	acuminate
lateral leaf veins	16–18 pairs	ca. 15–20 pairs
leaf indumentum below	coppery tomentose	glabrous ^a
petiole length	to 2.5 cm	3 cm ^a
petiole indumentum	glabrous	initially coppery pubescent, later glabrescent
stipules externally	coppery sericeous	coppery tomentose
bract number	2	3
tepal number	17	6 (illustration) ^a
tepal length	3.2–3.5 cm	3.5–4 cm ^a
gynoecium length	8 mm	8–13 mm
gynoecium/androecium	gynoecium not exerted from androecium	gynoecium exerted from androecium ^b
carpel attachment	short-stalked	sessile (Poilane 12611)
fruit peduncle	glabrous or pilose	tomentose
fruit peduncle length	2.2–2.7 cm	ca. 3–3.5 cm (pre-maturity)
fruit aggregates	6–9 cm	to 10.5 cm ^b
fruiting period	October (Chen 86S-193)—the paratype fruit in April is probably fallen fruit	July (Poilane 12611)
known altitude	1760–1950 m	1800 m
distribution	CHINA: SE Yunnan, Maguan County, Jiulian Shan and Gulinqing	NORTHERN VIETNAM: west of Sapa, Hoàng Liên National Park, Lào Cai Province. Also in Na Hang Nature Reserve, Tuyên Quang Province

Note: The listed features of *Michelia oblongifolia* are from [11], Chen (1987: 86), with those of *Michelia aenea* from [37], Dandy (1930: 211), supplemented by [38], Hô (1999: 237) ^a, and occasionally [26], Liu et al. (2004: 212) ^b. Much of the description of *Michelia aenea* in *Magnolias of China* belongs to *Michelia oblongifolia*.

Table 5. The 38 presently known comparative features between *Michelia oblongifolia* Hung T. Chang & B.L. Chen and *Michelia foveolata* Merr. ex Dandy, with 22 distinguishing diagnostic features highlighted (in bold).

	<i>Michelia oblongifolia</i>	<i>Michelia foveolata</i>
life form	medium-sized tree to ca. 16 m	large-sized tree to 30 m ^e (to 45 m ^a)
trunk diameter	to 50 cm	to 80 cm ⁴ (to 122 cm ^b – see photo p. 257 ^e)
bark colour	dark ash-grey (reddish brown on isotype label)	pale or dark grey ^e
young twigs indumentum	coppery or rusty tomentose	densely rufous tomentellous ^e
leaf bud indumentum	coppery sericeous	densely rufous tomentellous ^e
* leaf shape	obovate–oblong, narrowly oblong or oblanceolate	oblong–elliptic, elliptic ovate or broadly lanceolate ^e
leaf dimensions	21–25 × 6–7.5 cm	17–23 × 6–11 cm ^e
leaf apex	acuminate or acutely obtuse	acuminate or short-acuminate ^e
leaf base	obtuse, rounded or narrowly cuneate, usually slightly oblique	obtuse, broadly cuneate or subcordate, often asymmetrical ^e
leaf indumentum adaxially	glabrous	coppery pubescent, chiefly near midrib, then glabrescent
leaf indumentum abaxially	minutely coppery tomentose, later ash grey, gradually glabrescent	coppery-red tomentellous ^d (=minutely tomentose)
lateral leaf veins	16–18 pairs	16–26 pairs ^d
* reticulate leaf veins	dense and conspicuous on both sides	dense on the abaxial surface
petiole length	ca. 2.5 cm	1.5–3 cm ^d (to 3.5 cm ^c)
petiole indumentum	glabrous	densely rufous tomentose ^e
stipules externally	coppery sericeous	coppery tomentose
* bract number	2	3–4
* bract external indumentum	shiny appressed-ferrugineous	densely brown sericeous ^a
* tepal number	17	9–12
* tepal colour	white, occasionally becoming yellow	pale yellow with purplish base ^e
tepal shape (outer 3)	obovate–elliptic	broadly obovate
tepal dimensions	3.2–3.5 × 1–1.2 cm (outer 3)	6–7 cm long ^e (outer 3)
stamen length	1.6 cm	2.5–3 cm ^b (2 cm ^c)
filament length	4 mm	7–10 mm ^d
gynoecium length	0.8 cm	2–3 cm
* gynoecium relative to androecium	not exerted from androecium	exserted well above androecium on a 1.7–2 cm stalk ^d
gynophore length	ca. 4 mm	17–20 mm ^d
immature carpel length	1 mm	ca. 3 mm ^d
carpel attachment	short-stalked	sessile
fruit peduncle hairs	glabrous or pilose	tomentose
fruit peduncle length	2.2–2.7 cm	1.5–2 cm

Table 5. Cont.

	<i>Michelia oblongifolia</i>	<i>Michelia foveolata</i>
fruit aggregates	6–9 cm	ca. 8–14 cm (7–20 cm ^d)
mature carpel shape	obovoid to ellipsoid	oblong–ellipsoid ^e
mature carpel length	1.6–3 cm	1–2.5 cm ^d
indumentum of carpels	glabrous	pubescent ^a (hairy ^c)
flowering period	April	March–May
altitudinal range	1760–1950 m	500–1800 m (China) ^e , 400–1400 m (Vietnam) ^c
known distribution	China: SE Yunnan, Maguan County, Gulinqing and Jiulian Shan	China: Jiangxi, Guangdong, S. Guangxi, S. Hunan, SW Guizhou, W. Hubei, SE Yunnan ^e . Vietnam: north–central mountain regions and central highlands ^c

Note: The listed features of *Michelia oblongifolia* are from [11], Chen (1987: 86), with an asterisk (*) indicating those seven features referenced in the naming authors' taxonomic diagnosis. Those of *Michelia foveolata* are from [39], Dandy (1928: 360), supplemented by [2], Chen & Nooteboom (1993: 1066) ^a; [40], Deng & Yang (2015: 152) ^b; [38], Hô (1999: 239) ^c; [25], Law et al. (1996: 181) ^d; and [26], Liu et al. (2004: 256) ^e.

Conservation status: Except for one doubtful unseen collection from Hupeh Province, all other collections of *Michelia oblongifolia* were made by Chen Bao-liang and Yang Shao-cheng during 1986 in a relatively small mountainous region in Maguan County, SE Yunnan, where this species is apparently endemic and probably Critically Endangered (CR) after 40 years with no further collections, nor has it been found to be anywhere in cultivation.

Recommendation: Everything considered, an evaluation of the IUCN conservation status of *Magnolia gulinqingensis* (syn. *Michelia oblongifolia*) at the type localities in the same general area of Maguan County, southeast Yunnan, independent of *Michelia foveolata* and its other synonyms, needs to be undertaken as early as possible, with the aim to head off its possible extinction in the event that this has not already occurred. Since there is a distinct possibility that this species may still survive in Gulinqing Nature Reserve in Maguan County, a field survey should be undertaken there to determine whether this is its last refuge on the planet.

***Magnolia valderi* C.B. Callaghan & S.K. Png, nom. nov.**

Replaced synonym: *Manglietia tenuifolia* Hung T. Chang & B.L. Chen, Acta Scientiarum Naturalium Universitatis Sunyatseni 1988(1): 110 (Chen 1988 [10])—non *Magnolia tenuifolia* Lesq. [Cretaceous fossil taxon], American Journal of Science and Arts, Ser. 2, Vol. 46: 100 (Lesquereux 1868 [13]).

Manglietia insignis (Wall.) Blume, in Annals of Missouri Botanical Garden 80(4): 1044 (Chen & Nooteboom 1993 [2]), World Checklist and Bibliography of Magnoliaceae: 52 (Frodin & Govaerts 1996 [17]), Acta Botanica Yunnanica 19(2): 132 (Li 1997 [35]) and Flora Yunnanica. Tomus 6 (Spermatophyta): 10 (Wu & Chen 2006 [18]), each p.p. quoad syn. *Manglietia tenuifolia* Hung T. Chang & B.L. Chen.

Manglietia caveana Hook. f. & Thomson, in Flora of China Vol. 7: 56 (Xia et al. 2008 [21]), p.p. quoad syn. *Manglietia tenuifolia* Hung T. Chang & B.L. Chen.

Manglietia duclouxii Finet & Gagnep., in Voucher Flora of Southeast Yunnan, Vol. 1: 22 (Sima & Lu 2009 [22]), A Taxonomic Revision of the Magnoliaceae from China: 85 (Sima 2011 [23]) and Magnoliaceae Plants of Guizhou: 29 (Deng & Yang 2015 [40]), each p.p. quoad syn. *Manglietia tenuifolia* Hung T. Chang & B.L. Chen.

Magnolia caveana (Hook. f. & Thomson) D.C.S. Raju & M.P. Nayar, in Phytotaxonomy 15: 108 (Khuraijam & Goel 2015 [41]) and online at World Checklist of Selected Plant

Families (Govaerts 2022 [42]), both p.p. quoad syn. *Manglietia tenuifolia* Hung T. Chang & B.L. Chen.

Chinese name: 薄叶木莲 meaning “thin-leaved manglietia”.

Proposed new Chinese name: 马关薄叶木兰 meaning “Maguan thin-leaved magnolia”.

Type: CHINA—Yunnan Province • Maguan County, alt. 1685 m, in forests, fr, October 1986, *Chen Bao-liang & Li Bao* 86s-195. Holotype: SYS 00095538!

Specimen image below accessed on 20 March 2019; reaccessed with a new URL on 22 October 2022:

Holotype (SYS): <https://www.cvh.ac.cn/spms/detail.php?id=08f40684>.

Paratypes: CHINA—Yunnan Province • ibid., 1986, *Chen Bao-liang & Yang Shao-cheng* Gs86-098. SYS n.v. • October 1986, *Chen Bao-liang & Li Bao* 86s-298. SYS n.v.

Additional material: CHINA—Yunnan Province • Malipo County, Laojun Shan, 1660 m, October 1987, *Chen Bao-liang* 87F-185. SYS 00051327 n.v. SYS 00051808 n.v.

Note: The distinguishing diagnostic features highlighted in bold in Tables 6–8 indicate *Manglietia tenuifolia* to be an independent genuine species to *M. insignis*, *M. duclouxii* and *M. caveana*, under which it was placed in synonymy by the previously listed authors. It is consequently reinstated and transferred to *Magnolia* with a necessary new name. The replacement name *Magnolia valderi* is proposed for *Manglietia tenuifolia*, because its transfer to *Magnolia* would otherwise create a later illegitimate homonym to the fossil taxon *Magnolia tenuifolia* Lesq. of 1868 [13] (ICN Art. 53.1, Note 3—“In accordance with Art. 53, later homonyms are illegitimate regardless of whether the type is fossil or non-fossil” [6]. The new name *Magnolia valderi* is dedicated to Dr Peter George Valder OAM (1928–2023), a distinguished Australian university lecturer, botanist, horticulturist, and author of two significant, informative and thoroughly researched books concerning the cultivated plants of China, *The Garden Plants of China* [43] and *Gardens in China* [44], with the first book giving information on where the species occur in the wild, from which the cultivars that are discussed are derived.

Table 6. The 22 presently known comparative features between *Manglietia tenuifolia* Hung T. Chang & B.L.Chen and *Manglietia insignis* (Wall.) Blume, with 7 distinguishing diagnostic features highlighted (in bold).

	<i>Manglietia tenuifolia</i>	<i>Manglietia insignis</i>
life form	medium-sized tree to 20 m	large-to-very-large tree to 30 m ^{b,c,g} (to 40 m ⁱ)
trunk diameter	to 55 cm	to 40 cm ^{c,f}
* twig indumentum	glabrous	rusty or yellowish brown pilose when young ^g
leaf shape	elliptic, obovate–elliptic or obovate	oblanceolate or oblong–elliptic ^g (oblanceolate to narrowly oval ^a)
* leaf texture	thinly leathery (as indicated by epithet)	leathery ^{a,g}
* leaf dimensions	12.1–18 × 4.8–7.4 cm	10–26 × 4–10 cm ^g
leaf apex	short acute or caudate–acuminate	acuminate or caudate–acuminate ^g
lateral leaf veins	10–14 pairs	11–20 ⁱ (12–24 ^{b,c}) pairs
* leaf indumentum abaxially	entirely glabrous	midribs rufous pilose or sparsely appressed puberulent ^g
petiole length	1.3–2 cm	1.9–3.2 cm [(1.3–) 1.7–2.5 (–3.5) cm ^h]
petiole indumentum	glabrous	fulvous–pubescent ^d

Table 6. Cont.

	<i>Manglietia tenuifolia</i>	<i>Manglietia insignis</i>
stipular scars	1/6 to 1/4 length of petiole	1/4 to 1/3 length of petiole ^g
tepala number	11 (determined from remnant scars)	9–12 ^e
stamen-bearing receptacle length	ca. 6 mm	5–14 mm ⁱ
* fruit pedicel	glabrous	fulvous–pubescent ^d
fruit shape	ovate–oblong	ovoid cylindrical ⁱ
fruit size	6.8–9.1 × 5–6 cm	5–10 × 2–3.8 cm ⁱ
mature carpel shape	elliptic	ovate–oblong ^d
mature carpel length	0.8–2.7 cm	1.27–1.9 cm ^d
seeds per carpel	3–4	1–4 ⁱ (3–6 ^{d,e})
altitudinal range	1685 m	900–1600 (–2600 m) ^g
distribution	Maguan and Malipo counties, SE Yunnan	Guangxi, SW Hunan, N Guizhou, Yunnan, SW Sichuan, SE Xizang, N Myanmar, NE India, Nepal ^g

Note: The listed features of *Manglietia tenuifolia* are cited from Chang & B.L. Chen in [10], Chen (1988: 110), who record the flowers as unknown, with an asterisk (*) indicating five features referenced in these authors' taxonomic diagnosis. Those of *Manglietia insignis* are from [45], Wallich (1824: 3, as *Magnolia insignis*), supplemented by [46], Bean (1973: 719) ^a; [40], Deng & Yang (2015: 54) ^b; [47], Fu & Jin (1992: 434) ^c; [48], King (1891: 211) ^d; [49], Kurz (1877: 25) ^e; [25], Law et al. (1996: 98) ^f; [26], Liu et al. (2004: 156) ^g; [50], Spongberg (1998: 132) ^h; and [51], Tiep (1980: 543) ⁱ.

Conservation status: *Magnolia caveana*, under which *Manglietia tenuifolia* is listed as a synonym, is recorded on the IUCN Red List of Threatened Species [32]) as Data deficient, resulting from a 31 August 2012 assessment which found that “there is no information on existing populations or threats across its entire range”, while noting that *M. caveana* is listed on the 2014 * Chinese Red List as Endangered. (* possibly this is meant to be 2004 [30]). Using IUCN criteria [37], Chinese authorities determined *M. caveana* as Endangered, EN B1ab (i,iii,v) [29] (p. 725). Also, on the IUCN Red List website [32], the conservation status of *Magnolia duclouxii*, under which *Manglietia tenuifolia* has been placed in synonymy in the past decade by Chinese taxonomists, was assessed on 21 September 2012 and is noted as “Data deficient, population trend unknown”, but that “based on its distribution, the species may be close to the Vulnerable thresholds”. However, Vietnamese researchers recommended in 2015 that *Magnolia duclouxii* from at least five locations in China and Vietnam should be provisionally classified as Endangered EN B2ab (i–v) c (i–iv) [52] (p. 131). Two years later, Chinese authorities, utilising IUCN criteria, determined *Manglietia duclouxii* as Vulnerable VU D1 [31] (p. 725).

Table 7. The 16 presently known comparative features between *Manglietia tenuifolia* Hung T. Chang & B.L.Chen and *Manglietia duclouxii* Finet & Gagnep, with 4 distinguishing diagnostic features highlighted (in bold).

	<i>Manglietia tenuifolia</i>	<i>Manglietia duclouxii</i>
tree height	ca. 20 m	to 6 m ^d (to 14 m ^f , to 16 m ^b)
trunk diameter	to 55 cm	to 23 cm ^b
leaf shape	elliptic, obovate–elliptic or obovate	oblanceolate or obovate–elliptic ^d
leaf dimensions	12.1–18 × 4.8–7.4 cm	8–13 × 2.5–4 cm ^{b,d}
leaf apex	short acute or caudate–acuminate	acuminate ^d

Table 7. Cont.

	<i>Manglietia tenuifolia</i>	<i>Manglietia duclouxii</i>
leaf base	cuneate or broadly cuneate	attenuate (cuneate ^b)
lateral leaf vein pairs	10–14	9–11 ^a (10–15 ^e)
leaf indumentum abaxially	entirely glabrous	scattered brown appressed-pubescent on surface, with long colourless hairs along margins/midrib ^a
petiole length	1.3–2 cm	1–1.2 cm (0.8–1.3 cm ^e)
stipular scars	1/6 to 1/4 length of petiole	ca. 1/3 length of petiole ^{b,d}
tepala number	11 (determined from remnant scars)	9 ^{b,d,e}
fruit shape	ovate–oblong	ovoid–ellipsoid ^d
fruit dimensions	6.8–9.1 × 5–6 cm	5–6 cm long ^{b,d}
fruiting period	October–November	September–October ^b
altitude	1685 m	to 2160 m ^b
distribution	Maguan and Malipo counties, SE Yunnan	Yanjin, NE Yunnan ^c (also SE Sichuan, N. Vietnam ^d)

Note: The listed features of *Manglietia tenuifolia* are cited from Chang & Chen in [10], Chen (1988: 110), who record the flowers as unknown. Those of *Manglietia duclouxii* are from Finet & Gagnepain [53] (1906: 33), who note the mature fruits as then unknown, supplemented by [2], Chen & Nooteboom (1993: 1039) ^a; [40], Deng & Yang (2015: 29) ^b; [25], Law et al. (1996: 98) ^c; [26], Liu et al. (2004: 134) ^d; [51], Tiệp (1980: 553) ^e; and [54], Yang et al. (2016: 159) ^f.

Table 8. The 17 presently known comparative features between *Manglietia tenuifolia* Hung T. Chang & B.L.Chen and *Manglietia caveana* Hook. f. & Thomson, with 4 distinguishing diagnostic features highlighted (in bold).

	<i>Manglietia tenuifolia</i>	<i>Manglietia caveana</i>
tree height	ca. 20 m	large tree ^a 30–40 m ^d
trunk diameter	to 55 cm	to 300 cm ^a
leaf shape	elliptic, obovate–elliptic or obovate	oblong
leaf texture	thinly leathery (as indicated by epithet)	leathery
leaf dimensions	12.1–18 × 4.8–7.4 cm	20.32–25.4 × 7.62–10.16 cm
leaf apex	short acute or caudate–acuminate	rounded, produced into short obtuse or acute point (shortly and abruptly acuminate ^a)
leaf base	cuneate or broadly cuneate	slightly narrowed at base ^a
lateral leaf vein pairs	10–14	13–15 ^a (11–15 ^c)
petiole length	1.3–2 cm	5.08 cm (3.175 cm ^a , 1.4–4.2 cm ^c)
stipular scars	1/6 to 1/4 length of petiole	2/3 length of petiole
tepala number	11 (determined from remnant scars)	10–12 ^a
fruit shape	ovate–oblong	ovoid ^a
fruit dimensions	6.8–9.1 × 5–6 cm	5.72–7.62 cm long ^a (4.5–9.5 × 2.8–5 cm ^c)
mature carpel length	0.8–2.7 cm	1.9 cm ^a
seeds per carpel	3–4	2–6 (1 ^a , 1–3 ^c)
altitude	1685 m	610–1067 m ^a
distribution	Maguan and Malipo counties, SE Yunnan	NE India (Assam) and Myanmar ^b

Note: The listed features of *Manglietia tenuifolia* are cited from Chang & Chen in [10], Chen (1988: 110), who record the flowers as unknown. Those of *Manglietia caveana* are from [55], Hooker & Thomson (1855: 76–77), supplemented by [48], King (1891: 212) ^a; [56], Cicuzza et al. (2007: 44) ^b; [51], Tiệp (1980: 555) ^c; and [57], Figlar & Sutton (2026: online—as *Magnolia caveana* excl. *Manglietia tenuifolia*) ^d.

Recommendation: The conservation status of *Manglietia tenuifolia* would be at a similar or higher level of endangerment than the previously mentioned taxa, since it is known only at the original collection sites at around 1660–1685 metres altitude in adjacent Maguan and Malipo counties in southeast Yunnan, China, and hence probably not in the tropical evergreen broadleaved forests below 700 metres of northern Vietnam (where it is incorrectly noted as a *Michelia* sp. [58] (p. 77), with none known to be in cultivation. However, its true status is unknown due to it having been hidden as a synonym of *Magnolia caveana* and *M. duclouxii*. Consequently, an IUCN evaluation of the current conservation status in the wild of *Manglietia tenuifolia* under the proposed new name of *Magnolia valderi* and independent from *M. caveana* and *M. duclouxii* is recommended to be undertaken as soon as possible! An appropriate starting point would be to determine whether this species occurs in the 1986 proclaimed 22,960 ha Laojun Shan Nature Reserve of Malipo and Maguan counties in southeastern Yunnan. This is because a collection of *Manglietia tenuifolia* was made at 1660 metres on Malipo County's Laojun Shan in October 1987 by Chen Bao-liang under number 87F-185, as was Chen & Yang's 87F-202 type specimen of *Michelia brachyandra* at 1680 metres, as noted under this other reinstated species in this paper.

4.2. Three New Combinations in *Magnolia*

***Magnolia balansae* var. *brevipes* (B.L. Chen) C.B. Callaghan & S.K. Png, comb. nov.**

Basionym: *Michelia balansae* var. *brevipes* B.L. Chen, Acta Scientiarum Naturalium Universitatis Sunyatseni 1988(1): 112 (Chen 1988 [10]).

Michelia balansae (A. DC.) Dandy, in Annals of Missouri Botanical Garden 80(4): 1079 (Chen & Nooteboom 1993 [2]), World Checklist and Bibliography of Magnoliaceae: 54 (Frodin & Govaerts 1996 [17]), Flora Yunnanica. Tomus 6 (Spermatophyta): 47 (Wu & Chen 2006 [18]), Flora of China Vol. 7: 89 (Xia et al. 2008 [21]) and A Taxonomic Revision of the Magnoliaceae from China: 240 (Sima 2011 [23]), each p.p. quoad syn. *Michelia balansae* var. *brevipes* B.L. Chen.

Magnolia balansae Aug. DC., online at World Checklist of Magnoliaceae (Govaerts 2003 [59]) p.p. quoad syn. *Michelia balansae* var. *brevipes* B.L. Chen.

Present Chinese name: 短柄苦梓含笑 meaning “short-stemmed bitter michelia”.

Proposed Chinese name: 短柄苦梓木兰 meaning “short-stemmed bitter magnolia”.

Type: CHINA—Yunnan Province • Malipo County, Nanwen River, Bachong township, Dazhai village, alt. 1165 m, small environment, northwest slope, roadside, sunny place, sparse forest, 5.7 m tree, 4 April 1987, Chen Bao-liang & Mai Chi-nan 87T-034. Holotype: SYS 00050878! Isotypes: SYS 00095539! SYS 00095540! SYS 00095541! SYS 00050877 n.v. SYS 00050879 n.v. NHN/L 0397470!

Specimen images below accessed on 20 March 2019, CVH images reaccessed with new URLs on 18 November 2022:

Holotype (SYS): <http://www.docin.com/p-1050989203.html> (Sima 2011: 315, photo 2–56) (accessed on 23 September 2026).

Isotype (SYS: sheet 1): <https://www.cvh.ac.cn/spms/detail.php?id=08f4078b> (accessed on 23 September 2026).

Isotype (SYS: sheet 2): <https://www.cvh.ac.cn/spms/detail.php?id=08f408bf> (accessed on 23 September 2026).

Isotype (SYS: sheet 3): <https://www.cvh.ac.cn/spms/detail.php?id=08f409e2> (accessed on 23 September 2026).

Isotype (NHN/L): http://medialib.naturalis.nl/file/id/L0397470_MLN/format/large?fpi=1 (accessed on 23 September 2026).

Note: *Michelia balansae* var. *brevipes* B.L. Chen is listed as a synonym of *Michelia balansae* by Nooteboom [2] because “the brachyblasts are rather short in the collections of *M.*

balansae var. *brevipes* collected in southeastern Yunnan, but intermediate forms are found throughout the area of distribution". This synonymy was subsequently recorded by the authors listed above. While Chen noted in his diagnosis the short 1 cm pedicels or flower-bearing shoots of his new variety (Nootboom's brachyblasts), other recorded differences to *M. balansae* are the shorter tepals (2.5–2.9 cm vs. 3.5–3.7 cm long [26]), where the maximum length of the variety is less than the minimum length of the species; the colour of the tepals (pale yellow vs. pale greenish white [26]); and the shape of the gynoecia (ellipsoid vs. ovoid [26]). As a distinct variety, Chen's *Michelia balansae* var. *brevipes* is reinstated and transferred to *Magnolia*.

Recommendation: The survival or otherwise of this variety should be determined at its only known wild locality near Dazhai village, Malipo County, Yunnan, where it was collected 39 years ago. The collection locality was elaborated more fully on the label attached to the holotype herbarium specimen as: "small environment in sparse woods on north-west slope at about 1165 m, located along roadside in Yang Department, vicinity of Dazhai village of Bachong township, situated on the Nanwen River in Malipo County, Yunnan". The villagers of Dazhai may possibly lead researchers to this *Michelia* that was growing along a local roadside 39 years ago.

***Magnolia brachyandra* (B.L. Chen & S.C. Yang) C.B. Callaghan & S.K. Png, comb. nov.**

Basionym: *Michelia brachyandra* B.L. Chen & S.C. Yang, Acta Scientiarum Naturalium Universitatis Sunyatseni 1988(3): 98 (Chen & Yang 1988 [12]).

Michelia chapensis Dandy, in Annals of Missouri Botanical Garden 80(4): 1078, 1081 (Chen & Nootboom 1993 [2]), World Checklist and Bibliography of Magnoliaceae: 55 (Frodin & Govaerts 1996 [17]), Flora Yunnanica. Tomus 6 (Spermatophyta): 48 (Wu & Chen 2006 [18]), Flora of China Vol. 7: 88 (Xia et al. 2008 [21]), Vouchered Flora of Southeast Yunnan, Vol. 1: 51 (Sima & Lu 2009 [22]), A Taxonomic Revision of the Magnoliaceae from China: 248 (Sima 2011 [23]) and Magnoliaceae Plants of Guizhou: 180 (Deng & Yang 2015 [40]), each p.p. quoad syn. *Michelia brachyandra* B.L. Chen B.L. & S.C. Yang.

Magnolia chapensis (Dandy) Sima, in Yunnan Forestry Science and Technology 2001(2): 29 (Sima 2001 [20]) and online at World Checklist of Magnoliaceae (Govaerts 2003 [59]), both p.p. quoad syn. *Michelia brachyandra* B.L. Chen & S.C. Yang.

Present Chinese name: 老君山含笑 meaning "Laojun Shan *Michelia*".

Proposed Chinese name: 老君山木兰 meaning "Laojun Shan *magnolia*".

Type: CHINA—Yunnan Province • Malipo County, Laojun Shan, alt. 1680 m, October 1987, fl, Chen Bao-liang & Yang Shao-cheng 87F202. Holotype: SYS n.v.

Holotype (SYS): specimen image not uploaded to CVH at 22 October 2022 (see note 1 below).

Note 1: The type specimen of *Michelia brachyandra* at SYS could not be found (Fan Qiang, pers. comm., July 2019).

Note 2: The distinguishing diagnostic features highlighted in bold in Table 9 indicate *Michelia brachyandra* to be an independent genuine species to *M. chapensis*, under which it was placed in synonymy by the previously listed authors. It is consequently reinstated and transferred to *Magnolia*.

Note 3: Research for a future paper has found *Michelia brachyandra* recorded in ex situ conservation at South China Botanical Garden, Guangzhou, Guangdong Province, where *Michelia chapensis* is also recorded. A mix-up of the Chinese and Latin names has created some uncertainty whether *Michelia brachyandra* also occurs at a second Chinese botanical garden.

Table 9. The 22 presently known comparative features between *Michelia brachyandra* B.L. Chen & S.C. Yang and *Michelia chapensis* Dandy, with 10 distinguishing diagnostic features highlighted (in bold).

	<i>Michelia brachyandra</i>	<i>Michelia chapensis</i>
height	ca. 26 m	to 30 m ^{a,d}
trunk diameter	to 29 cm	to 100 cm ^{a,d}
leaf shape	obovate–elliptic or oblong	obovate, narrowly obovate or oblong–obovate ^d
leaf dimensions	9–12 × 4.3–5.3 cm	6.5–15 × 3.5–6.5 cm ^d
leaf apex	acute	abruptly narrowly short-acuminate or short-acuminate with obtuse mucro ^d
* leaf texture	thickly leathery	thinly leathery or leathery
lateral leaf vein pairs	8–11	ca.10–15 [9–12 (–15) ^{a,c}]
petiole length	2.1–2.5 cm	1.7–2 cm ^b (1.5–2.5 cm ^{a,c})
* external indumentum of stipules	appressed coppery tomentose	reddish or grey tomentellous or puberulent externally when young
* external indumentum of bracts	appressed coppery tomentose	reddish or grey tomentellous or puberulent externally when young
flower bract number	2	3–4 (2–5 ^c)
pedicel length	8 mm	4–10 mm
pedicel indumentum	coppery tomentose	appressed grey puberulent ^c
tepal shape	obovate–oblong	outer 3: obovate–elliptic ^d
stamen length	short (as indicated by epithet)	long, ca. 14–22 mm
gynoecium shape	narrowly ovate	narrowly cylindrical
* gynoecium relative to androecium	overtopping androecium	fully within androecium ^d
gynophore indumentum	tomentose	densely appressed puberulent ^d
immature carpels	ca. 63	est. 15–30(–35) from pre-1984 CVH specimens
ovules per carpel	4 (–6)	6–8
altitude	1680 m	500–1500 m ^d
distribution	Malipo County, SE Yunnan	S. Jiangxi, W. Hunan, N. Guangdong, NE and SE Guangxi plus Vietnam ^d

Note: The features of *Michelia brachyandra* are from [12], Chen & Yang (1988: 98), who record the fruit as unknown, with an asterisk (*) indicating four comparative features referenced in these authors' taxonomic diagnosis. The comparative features of *M. chapensis* are from [24], Dandy (1929: 223), plus [40], Deng & Yang (2015: 180) ^a; ref. [38], Hô (1999: 238) ^b; ref. [25], Law et al. (1996: 170); ^c and ref. [26], Liu et al. (2004: 232) ^d.

Conservation status and recommendation: As far as can be ascertained, *Michelia brachyandra* remains known only from the original single type collection in 1987 and would have been endangered even at that time. Consequently, a survey on behalf of the IUCN of the present numbers in the wild of *Magnolia brachyandra* (syn. *Michelia brachyandra*) at Laojun Shan situated in Malipo County of southeastern Yunnan needs to be undertaken at the earliest opportunity! This should determine whether this species is afforded protection within Yunnan's 1986 established Laojun Shan Nature Reserve, expanded from 4507 ha at the time of Chen & Yang's collection [60] to its present size of 22,960 ha, or whether this species, found on Laojun Shan in October 1987 at 1680 m, as was *Manglietia tenuifolia* at 1660 m, is beyond the reserve's protection.

Magnolia chartacea (B.L. Chen & S.C. Yang) C.B. Callaghan & S.K. Png, comb. nov.

Basionym: *Michelia chartacea* B.L. Chen & S.C. Yang, Acta Scientiarum Naturalium Universitatis Sunyatseni 1988(3): 97 (Chen & Yang 1988 [12]).

Michelia chapensis Dandy, in Annals of Missouri Botanical Garden 80(4): 1079 (Chen & Nooteboom 1993 [2]), World Checklist and Bibliography of Magnoliaceae: 55 (Frodin & Govaerts 1996 [17]), Flora Yunnanica. Tomus 6 (Spermatophyta): 48 (Wu & Chen 2006 [18]), Flora of China Vol. 7: 88 (Xia et al. 2008 [21]), Vouchered Flora of Southeast Yunnan, Vol. 1: 51 (Sima & Lu 2009 [22]), A Taxonomic Revision of the Magnoliaceae from China: 248 (Sima 2011 [23]) and Magnoliaceae Plants of Guizhou: 180 (Deng & Yang 2015 [40]), each p.p. quoad syn. *Michelia chartacea* B.L. Chen & S.C. Yang.

Magnolia chapensis (Dandy) Sima, in Yunnan Forestry Science and Technology 2001(2): 29 (Sima 2001 [20]), and online at World Checklist of Magnoliaceae (Govaerts 2003 [59]), both p.p. quoad syn. *Michelia chartacea* B.L. Chen & S.C. Yang.

Present Chinese name: 麻栗坡含笑 meaning “Malipo michelia”.

Proposed Chinese name: 麻栗坡木兰 meaning “Malipo magnolia”.

Type: CHINA—Yunnan Province • Malipo County, in forests, alt. 1650 m, 1987, Chen Bao-liang & Yang Shao-cheng 87F186. Holotype: SYS n.v. **ibid.** • unspecified date, Chen Bao-liang & Yang Shao-cheng 8706. Topotype: YCP n.v. **ibid.** • unspecified date, Chen Bao-liang & Yang Shao-cheng 8738. Topotype: YCP n.v.

Paratypes: CHINA—Yunnan Province • Xichou County, alt. 1585 m, 1987, Chen Bao-liang 87F179. SYS? n.v. **ibid.** • 1986, Chen Bao-liang & Li Bao GS9024. SYS? n.v.

Holotype (SYS): specimen image not uploaded to CVH at 22 October 2022—see note 1 below. All the other type specimens listed above could not be located by the present authors.

Additional material: CHINA—Yunnan Province • Xichou County? alt. 1585 m, Oct. 1984, Li Da-xiao 841012. IBSC 0085940 n.v. (identified in 2001 by Zhou Ren-zhang at IBSC). • Pingbian Miao Autonomous County, Shuiweicheng, in forests, alt. 2000 m, tree 25 m, 30 August 1999, Shui Yu-min et al. 10344. PE 01974161!

Specimen image accessed on 18 November 2022:

(PE): <https://www.cvh.ac.cn/spms/detail.php?id=e85b9ada>.

Note 1: The holotype specimen of *Michelia chartacea* at SYS could not be found (Fan Qiang, pers. comm., July 2019).

Note 2: Recently published research supports the division of Magnoliaceae into the monogeneric subfamilies Magnolioideae and Liriodendroideae. This research includes a UPGMA clustering diagram of genomic relationships between 135 species of Magnoliaceae [61] (p. 30, Figure 3.6), which reveals the closest relative to *Michelia chartacea* to be *M. platypetala* Hand.-Mazz., with *M. chapensis* a distant relative on the opposite side of the genome map. An earlier UPGMA clustering diagram places *Michelia chartacea* and *M. platypetala* branched next to each other among the various branches of category IV, with *M. chapensis* isolated amongst the branches of category V [62] (p. 416, Figure 2). A previously published study of the genetic diversity of 48 wild species of Magnoliaceae in Yunnan Province utilising ISSR molecular markers showed *Michelia chartacea* in isolation on the accompanying UPGMA cluster map [63] (p. 281, Figure 2), with *M. chapensis* and *M. platypetala* not included, since they do not occur in Yunnan [26] (p. 232, p. 306). A recent phylogenetic analysis [64] (Figure 1) “showed that *M. chartacea* was closely related with *M. martini* (Levl) Levl. and *M. maudiae* Dunn, forming a clade included in *Michelia*”. In addition to the above information, the distinguishing diagnostic features highlighted in bold in Table 10 of the present paper confirm *Michelia chartacea* to be an independent genuine species to *M. chapensis* and it is consequently reinstated and transferred to *Magnolia*.

Table 10. The 20 presently known comparative features between *Michelia chartacea* B.L. Chen & S.C. Yang and *Michelia chapensis* Dandy, with 7 distinguishing diagnostic features highlighted (in bold).

	<i>Michelia chartacea</i>	<i>Michelia chapensis</i>
height	to 23 m	to 30 m ^e
trunk diameter	38.5 cm (to 40 cm ^a)	to 100 cm ^e
* branchlet orientation	pendulous	upright or spreading
* leaf shape	obovate–oblong or oblong	obovate, narrowly obovate or oblong–obovate, often with regular wavy margins ^e
leaf dimensions	10.5–14 (–16.5) × 3.7–4.3 (–6) cm	6.5–15 × 3.5–6.5 cm ^e
* leaf texture	papery (chartaceus)	thinly leathery (thickly leathery ^c)
lateral leaf veins pairs	7–10	ca. 10–15 [9–12 (–15) ^d]
petiole length	1–1.5 cm	1.7–2 cm ^c (1.5–2.5 cm ^d)
petiole indumentum	glabrous	puberulent near base when young, then glabrous
stipule indumentum	loosely ferrugineous pubescent externally	reddish or grey tomentellous or puberulent externally when young
flower bud bracts	3	3–4 (2–5 ^d)
flower colour	white	pale yellow
gynophore indumentum	tomentose	densely appressed puberulent ^d
fruit peduncle length	1–1.4 cm	ca. 2 cm ^d
fruit aggregate length	10.5–28 cm	ca. 10 cm ^{d,e}
* mature carpel no.	57–96	1–14 or more ^b
mature carpel shape	ovoid or ellipsoid	ovoid ^e
mature carpel size	13–15 mm long	10–15 × 10 mm ^d
fruiting period	October	August–September ^d (November ^e)
altitude	1500–1700 (–2000) m	500–1500 m
distribution	Malipo and Xichou counties, Pingbian Miao Autonomous County, SE Yunnan	S. Jiangxi, W. Hunan, NE and SE Guangxi, N. Guangdong and N. Vietnam ^e (Sapa ^c)

Note: The listed features of *Michelia chartacea* are from [12], Chen & Yang (1988: 97), who record the flowers as then unknown, plus [26], Liu et al. (2004: 233) ^a, with an asterisk (*) indicating four comparative features referenced in the taxonomic diagnosis of Chen & Yang. The listed features of *Michelia chapensis* are from [24], Dandy (1929: 223), supplemented by [2], Chen & Nooteboom (1993: 1081) ^b; [38], Hô (1999: 238) ^c; [25], Law et al. (1996: 170) ^d; and [26], Liu et al. (2004: 232) ^e.

Conservation status and recommendation: Within five years of its naming, *Michelia chartacea* was reduced to a synonym of *Michelia chapensis* and as a consequence the in situ conservation status of this species has effectively been out of consideration for the past 33 years. Therefore, an IUCN evaluation of the current situation in the wild of *Magnolia chartacea* (syn. *Michelia chartacea*) within Xichou and Malipo Counties of Wenshan Prefecture, where this species is said to be endemic [65] and recorded for Wenshan National Nature Reserve [66], should be carried out as a matter of urgency. This could be in conjunction with an evaluation of the conservation status of other Magnoliaceae taxa from the surrounding regions of southeast Yunnan that have been reaffirmed as distinct genuine species in this research paper.

5. Conclusions

Now once again recognised and reinstated as the independent species or variety as was determined by Chen Bao-liang and associated taxonomists in 1987 and 1988 from collections he and his botanical colleagues made in southeastern Yunnan in 1986 and 1987,

determination of their present in situ and ex situ conservation status at the earliest opportunity is the obvious next requirement, with any protection measures put in place to ensure their survival into the future.

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Conflicts of Interest: The authors declare no conflicts of interest.

Appendix A

Table A1. Institutional herbarium acronyms. The acronyms representing herbaria where the type specimens are deposited are as follows.

IBSC	Department of Taxonomy Herbarium, South China Institute of Botany (SCBI), Chinese Academy of Sciences, Tianhe District, Guangzhou, Guangdong, China.
NHN/L	National Herbarium of the Netherlands, Rijksherbarium, Leiden University, Leiden, the Netherlands.
PE	Herbarium, Laboratory of Systematic and Evolutionary Botany, Institute of Botany, Chinese Academy of Sciences, Nanxin, Xiangshan, Beijing, China.
SYS	Botanical Division Herbarium, Biology Department, Zhongshan University (Sun Yat-sen University), Haizhu District, Guangzhou, Guangdong, China.
YCP	Herbarium, Yunnan Laboratory for the Conservation of Rare Endemic Forest Plants, Heilongtan, Kunming, China.

Note: The previous herbarium acronyms and their institutions were located at the following online site: Thiers BM (ed.) Index Herbariorum. A searchable online facility of the world's herbaria utilises the required herbarium's acronym to provide a collection summary and also lists of the herbarium's correspondent(s), plus their staff and research associates: <http://sweetgum.nybg.org/science/ih/> (accessed on 27 April 2016).

References

- Chen, B.L.; Baas, P.; Wheeler, E.A.; Wu, S.M. Wood Anatomy of Trees and Shrubs from China. VI. Magnoliaceae. *IAWA J.* **1993**, *14*, 391–412. [\[CrossRef\]](#)
- Chen, B.L.; Nooteboom, H.P. Notes on Magnoliaceae III: The Magnoliaceae of China. *Ann. Mo. Bot. Gard.* **1993**, *80*, 999–1104. [\[CrossRef\]](#)
- Callaghan, C.B.; Png, S.K. Unravelling the ill-conceived *Magnolia lacei* synonymy complex reveals the negative consequences of unsubstantiated synonymy to Magnoliaceae species. *PhytoKeys* **2026**, *279*, 111–136. [\[CrossRef\]](#)
- Callaghan, C.B.; Png, S.K. If these aren't genuine species, what are? An analysis of heterotypic synonyms contributes to 19 new names and 20 new combinations in *Magnolia* (Magnoliaceae). Part 2: New combinations. *PhytoKeys* **2026**, *277*, 77–151. [\[CrossRef\]](#) [\[PubMed\]](#)
- Wang, Y.B.; Liu, B.B.; Nie, Z.L.; Chen, H.F.; Chen, F.J.; Figlar, R.B.; Wen, J. Major clades and a revised classification of *Magnolia* and Magnoliaceae based on whole plastid genome sequences via genome skimming. *J. Syst. Evol.* **2020**, *58*, 673–695. [\[CrossRef\]](#)

6. Turland, N.J.; Wiersema, J.; Barrie, F.R.; Gandhi, K.N.; Gravendyck, J.; Greuter, W.; Hawkesworth, D.L.; Herendeen, P.S.; Klopfer, R.R.; Knapp, S.; et al. (Eds.) *International Code of Nomenclature for Algae, Fungi, and Plants (Madrid Code) Accepted by the Twentieth International Botanical Congress, Madrid, Spain, July 2024*; University of Chicago Press: Chicago, IL, USA; London, UK, 2025. Available online: https://www.iaptglobal.org/_functions/code/madrid (accessed on 5 January 2026).
7. Voss, E.G.; Greuter, W.; Burdet, H.M.; Chaloner, W.G.; Demoulin, V.; Hiepko, P.; McNeill, J.; Meikle, R.D.; Nicolson, D.H.; Rollins, R.C.; et al. (Eds.) *International Code of Botanical Nomenclature (Sydney Code) Adopted by the Thirteenth International Botanical Congress, Sydney, Australia, August 1981*; Regnum Vegetabile; Bohn, Scheltema & Holkema: Utrecht, The Netherlands, 1983; Volume 111. Available online: <https://www.iapt-taxon.org/historic/1983.htm> (accessed on 5 January 2026).
8. Greuter, W.; McNeill, J.; Burdet, H.M.; Chaloner, W.G.; Demoulin, V.; Grolle, R.; Hawkesworth, D.L.; Nicolson, D.H.; Silva, P.C.; Stafleu, F.A.; et al. (Eds.) *International Code of Botanical Nomenclature (Berlin Code) Adopted by the Fourteenth International Botanical Congress, Berlin, Germany, July–August 1987*; Regnum Vegetabile; Koeltz Scientific Books: Königstein, Germany, 1988; Volume 118. Available online: <https://www.iapt-taxon.org/historic/1988.htm> (accessed on 5 January 2026).
9. Chinese Virtual Herbarium—CVH (Continual Specimen Postings). Available online: <https://www.cvh.ac.cn/> (accessed on 6 January 2026).
10. Chen, B.L. New taxa of Magnoliaceae from Yunnan. *Acta Sci. Nat. Univ. Sunyatseni* **1988**, *1988*, 107–112. (In Chinese)
11. Chen, B.L. Four new species of *Michelia* from Yunnan. *Acta Sci. Nat. Univ. Sunyatseni* **1987**, *1987*, 86–91. (In Chinese and Latin)
12. Chen, B.L.; Yang, S.C. New taxa of Magnoliaceae from Yunnan, China. *Acta Sci. Nat. Univ. Sunyatseni* **1988**, *1988*, 94–99. (In Chinese)
13. Lesquereux, C.L. Memoir “On some Cretaceous fossil plants from Nebraska”. *Am. J. Sci. Arts* **1868**, *46*, 91–105. [CrossRef]
14. Smith, W.W. Diagnoses Specierum novarum in herbario Horti Regii Botanici Edinburgensis cognitarum CCCCLI–D. *Notes Roy. Bot. Gard.* **1920**, *12*, 191–230. [CrossRef]
15. Palmarola, A.; Romanov, M.S.; Bobrov, A.V.F.C.; González-Torres, L.R. Cuban magnolias: *Talauma*—Taxonomy and nomenclature. *Rev. Jard. Bot. Nac.* **2016**, *37*, 1–10. (In Spanish with English abstract)
16. Kuntze, O. *Revisio Generum Plantarum, Part 1*; [*Michelia nitida* (Miq.), page 241]; Arthur Felix: Leipzig, Germany; Dulau & Co.: London, UK, 1891. Available online: <https://www.biodiversitylibrary.org/item/7555#page/398> (accessed on 25 November 2022).
17. Frodin, D.G.; Govaerts, R. *World Checklist and Bibliography of Magnoliaceae*; Information Services Dept.; Royal Botanic Gardens, Kew: Richmond, UK, 1996.
18. Wu, Z.Y.; Chen, S.K. Magnoliaceae. In *Flora Yunnanica*; Tomus 6 (*Spermatophyta*); Science Press: Beijing, China, 2006; pp. 1–62. Available online: <https://www.biodiversitylibrary.org/page/36698160#page/1> (accessed on 28 March 2020). (In Chinese)
19. Figlar, R.B. Proleptic branch initiation in *Michelia* and *Magnolia* subgenus *Yulania* provides basis for combinations in subfamily Magnolioideae. In *Proceedings of the International Symposium on the Family Magnoliaceae, Guangzhou, China, 18–22 May 1998*; Liu, Y.H., Fan, H.M., Chen, Z.Y., Wu, Q.G., Zeng, Q.W., Eds.; Science Press: Beijing, China, 2000; pp. 14–25.
20. Sima, Y.K. Some notes on *Magnolia* subgenus *Michelia* from China. *Yunnan For. Sci. Technol.* **2001**, *2*, 29–35+40. (In Chinese with English end title/abstract)
21. Xia, N.H.; Liu, Y.H.; Nooteboom, H.P. Magnoliaceae. In *Flora of China Vol. 7, Menispermaceae Through Capparaceae*; Wu, Z.Y., Raven, P.H., Hong, D.Y., Eds.; Science Press: Beijing, China; Missouri Botanical Garden Press: St. Louis, MO, USA, 2008; pp. 48–91. Available online: http://www.efloras.org/florataxon.aspx?flora_id=2&taxon_id=10530 (accessed on 20 March 2020).
22. Sima, Y.K.; Lu, S.G. Magnoliaceae. In *Vouchered Flora of Southeast Yunnan*; Shui, Y.M., Sima, Y.K., Wen, J., Chen, W.H., Eds.; Yunnan Science & Technology Press: Kunming, China, 2009; Volume 1, pp. 16–79. Available online: <http://www.doc88.com/p-9455111883790.html> (accessed on 30 March 2020).
23. Sima, Y.K. A Taxonomic Revision of the Magnoliaceae from China. PhD. Dissertation, School of Life Science, Yunnan University, Kunming, China, 2011; 377p. (In Chinese with English subtitle/abstract)
24. Dandy, J.E. Three new michelias from Indo-China. *J. Bot. Br. Foreign* **1929**, *67*, 222–224.
25. Law, Y.W. Magnoliaceae. In *Flora Reipublicae Popularis Sinicae*; Law, Y.W., Lo, H.S., Wu, Y.F., Chang, B.N., Eds.; Science Press: Beijing, China, 1996; Volume 30, pp. 82–198. Available online: <http://www.iplant.cn/info/Trib.%20MAGNOLIEAE?t=z> (accessed on 28 March 2020). (In Chinese)
26. Liu, Y.H.; Law, Y.W.; Zeng, Q.W.; Zhou, R.Z.; Xing, F.W. (Eds.) *Magnolias of China*; Baitong Group; Beijing Science & Technology Press: Beijing, China, 2004. (In Chinese and English)
27. Xing, F.W.; Zeng, Q.W.; Chen, H.F.; Wang, F.G. (Eds.) Magnoliaceae. In *Landscape Plants of China*; Huazhong University of Science and Technology Press: Wuhan, China, 2009; Volume 1, pp. 177–217. (In Chinese)
28. IUCN. *The IUCN Red List of Threatened Species: Categories and Criteria (Version 3.1)*; 2001a, 2nd English language edition; IUCN Species Survival Commission: Gland, Switzerland; Cambridge, UK, 2012; pp. 1–32. Available online: <https://portals.iucn.org/library/sites/library/files/documents/RL-2001-001-2nd.pdf> (accessed on 30 April 2026).
29. IUCN. *The IUCN Red List of Threatened Species: Categories and Criteria (Version 3.1)*; 2001b, 1st Chinese language edition; IUCN Species Survival Commission: Gland, Switzerland; Cambridge, UK; pp. 1–48.

30. Wang, S.; Xie, Y. (Eds.) *China Species Red List*; Chinese National Environmental Protection Agency; Chinese Endangered Species Scientific Commission; Higher Education Press: Beijing, China, 2004; Volume 1. (In Chinese and English, Latin plant names)
31. Qin, H.N.; Yang, Y.; Dong, S.Y.; He, Q.; Jia, Y.; Zhao, L.N.; Yu, S.X.; Liu, H.Y.; Liu, B.; Yan, Y.C.; et al. Threatened species list of China's higher plants. *Biodivers. Sci.* **2017**, *25*, 696–744. (In Chinese with English subtitle/abstract) [[CrossRef](#)]
32. IUCN. *The IUCN Red List of Threatened Species*; Version 2025-2; International Union for the Conservation of Nature and Natural Resources: Gland, Switzerland; Cambridge, UK, 2026. Available online: <https://www.iucnredlist.org/species/193957/2292193> (accessed on 5 February 2026).
33. Sun, W.B.; Yan, L.; Magin, G.; Zhou, Y. Conservation of Magnoliaceae in China: Five flagship species in Yunnan, SW China. In Proceedings of the 3rd Global Botanic Gardens Congress, Wuhan, China, 15–20 April 2007; pp. 1–5. Available online: <https://www.bgci.org/files/Wuhan/PapersConserving/SunMagnolia.pdf> (accessed on 21 November 2022).
34. Ren, H. (Ed.) *Conservation and Reintroduction of Rare and Endangered Plants in China*; Springer: Singapore, 2020; 232p. [[CrossRef](#)]
35. Li, J. Some notes on Magnoliaceae from China. *Acta Bot. Yunnan* **1997**, *19*, 131–138. (In Chinese, English subtitle/abstract)
36. Kew Plants of the World Online (POWO). *Michelia oblongifolia* Heterotypic Synonym of *M. foveolata*. Available online: <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:20011693-1#synonyms> (accessed on 20 April 2026).
37. Dandy, J.E. New Magnoliaceae from China and Indo-China. *J. Bot. Br. For.* **1930**, *68*, 204–214.
38. Hô, P.H. (Ed.) Magnoliaceae. In *An Illustrated Flora of Vietnam*; Tre Publishing House: Hanoi, Vietnam, 1999; Volume 1, pp. 230–242. Available online: <https://dokumen.pub/qdownload/an-illustrated-flora-of-vietnam-cay-co-viet-nam-quyen-i.html> (accessed on 18 April 2026). (In Vietnamese)
39. Dandy, J.E. Two new michelias from Kwangtung. *J. Bot. Br. Foreign* **1928**, *66*, 359–361.
40. Deng, L.X.; Yang, X.Y.; Yang, C.H.; Zhou, J.W.; Chen, Z.P.; Shen, J.M. *Magnoliaceae Plants of Guizhou*; Guizhou Science and Technology Publishing House: Guiyang, China, 2015. (In Chinese)
41. Khuraijam, J.S.; Goel, A.K. Enumeration of the genus *Magnolia* L. in India with its conservation status. *Phytotaxonomy* **2015**, *15*, 107–113.
42. Govaerts, R. (Compiler) World Checklist of Selected Plant Families (2022, WCSP Online: Magnoliaceae). Facilitated by the Royal Botanic Gardens, Kew. Available online: <https://wcsp.science.kew.org/> (accessed on 12 October 2022).
43. Valder, P. *The Garden Plants of China*; Florilegium: Sydney, Australia, 1999.
44. Valder, P. *Gardens in China*; Florilegium: Sydney, Australia, 2002.
45. Wallich, N. *Tentamen Floræ Nepalensis Illustratæ: Consisting of Botanical Descriptions and Lithographic Figures of Select Nipal Plants*; Asiatic Lithographic Press: Calcutta, India; Serampore, India, 1824. Available online: <https://www.biodiversitylibrary.org/item/265960#page/15/mode/1up> (accessed on 2 October 2022).
46. Bean, W.J. *Trees and Shrubs Hardy in the British Isles*; John Murray Ltd.: London, UK, 1973; Volume II. Available online: <http://www.beanstreesandshrubs.org/> (accessed on 30 March 2020).
47. Fu, L.G.; Jin, J.M. (Eds.) *China Plant Red Data Book. Rare and Endangered Plants*; information on 388 threatened taxa; Science Press: Beijing, China; New York, NY, USA, 1992; Volume 1.
48. King, G. The Magnoliaceae of British India. *Ann. R. Bot. Gard.* **1891**, *3*, 197–225. Available online: <http://www.biodiversitylibrary.org/item/84460#page/223> (accessed on 30 March 2020).
49. Kurz, S. *Forest Flora of British Burma, Vol. 1 (Ranunculaceae to Cornaceae), 1877*; [Manglietia insignis (Wall.) Blume., p. 25]; M/s Bishen Singh Mahendra Pal Singh: Dehra Dun, India; M/s Periodical Experts: Delhi, India, 1974. Available online: <http://www.biodiversitylibrary.org/item/112239#page/57> (accessed on 30 March 2020).
50. Spongberg, S.A. Magnoliaceae Hardy in Cooler Temperate Climates. In *Magnolias and their Allies, Proceedings of an International Symposium, Royal Holloway, University of London, Egham, Surrey, UK, 12–13 April 1996*; Hunt, E.D., Ed.; International Dendrology Society and The Magnolia Society: Sherborne, UK, 1998; pp. 81–144.
51. Tiệp, N.V. Beiträge zur sippenstruktur der gattung *Manglietia* Bl. (Magnoliaceae). *Feddes Repert.* **1980**, *91*, 497–576. (In German with English summary) [[CrossRef](#)]
52. Nguyễn, Q.H.; Nguyễn, T.H.; Tù, B.N.; Nguyễn, S.K. Preliminary studies on the diversity of magnolias of Ha Giang Province and the assessment of their conservation status. In *Proceedings of the Sixth National Scientific Conference on the Ecology and Biological Resources, Hanoi, Vietnam, 21 October 2015*; Long, K.D., Ed.; Institute of Ecology and Biological Resources: Hanoi, Vietnam, 2015; pp. 130–136. (In Vietnamese with English end title/summary)
53. Finet, A.E.; Gagnepain, F. Contributions à l'étude de la flore de l'Asie orientale. *Bull. Soc. Bot. Fr.* **1906**, *4*, 55–170. (In Latin and French)
54. Yang, K.M.; Chen, X.L.; Gong, X.; Wang, Y.L. (Eds.) *Ex Situ Cultivated Flora of China (Magnoliaceae)*; Science Press: Beijing, China, 2016. (In Chinese with English subtitle)
55. Hooker, J.D.; Thomson, T. *Flora Indica Vol. 1: Being a Systematic Account of the Plants of British India, Together with Observations on the Structure and Affinities of Their Natural Orders and Genera*; [Manglietia caveana Hook. & Thoms., pp. 76–77]; W. Pamplin: London, UK, 1855. Available online: <https://www.biodiversitylibrary.org/item/105730#page/379> (accessed on 30 March 2020).

56. Cicuzza, D.; Newton, A.; Oldfield, S. *The Red List of Magnoliaceae*; Fauna & Flora International: Cambridge, UK, 2007. Available online: <https://portals.iucn.org/library/sites/library/files/documents/RL-2007-001.pdf> (accessed on 30 March 2020).
57. Figlar, R.B.; Sutton, J. *Magnolia caveana*. Trees and Shrubs Online. 2022. Available online: <https://www.treesandshrubsonline.org/> (accessed on 15 March 2026).
58. Le, B.T.; Yan, X.W. The status of biodiversity and its protection countermeasures of Vietnam. *Hunan For. Sci. Tech.* **2012**, *39*, 76–79. (In Chinese with English subtitle and abstract) [[CrossRef](#)]
59. Govaerts, R. World Checklist of Magnoliaceae (Online). Facilitated by the Royal Botanic Gardens, Kew. 2003. Available online: <https://wcsp.science.kew.org/> (accessed on 12 October 2022).
60. Li, W.H.; Zhao, X.Y. *China's Nature Reserves*; Foreign Languages Press: Beijing, China, 1989.
61. Li, J.J. Analysis of Genetic Relationship of Magnoliaceae Based on ISSR. Master's Thesis, Central South University of Forestry and Technology, Changsha, China, 2021. Available online: <https://www.doc88.com/p-14787848196166.html> (accessed on 15 November 2022). (In Chinese with English subtitle/abstract)
62. Li, J.J.; Peng, J.Q.; Wu, Y.; Wang, Y.L.; Liao, T.Z.; Ma, B.; Xue, C.; Yu, L.Q.; Xie, Q.Y.; Wang, H.Y.; et al. Genetic diversity among the species of *Michelia* in China using ISSR. *Int. J. Agric. Biol.* **2020**, *24*, 413–419. [[CrossRef](#)]
63. Wang, M.; Peng, J.Q.; Cao, J.W.; Cao, F.X.; Li, J.J.; Xue, E.C.; Wu, Y. Studies on genetic diversity of 48 wild species of Magnoliaceae in Yunnan. *J. Trop. Subtrop. Bot.* **2020**, *28*, 277–284. (In Chinese with English subtitle/abstract) [[CrossRef](#)]
64. Li, Y.Y.; Zhou, M.; Wang, L.M.; Wang, J.Q. The characteristics of the chloroplast genome of the *Michelia chartacea* (Magnoliaceae). *Mitochondrial DNA Part B Resour.* **2021**, *6*, 493–495. [[CrossRef](#)] [[PubMed](#)]
65. Yang, X.Z. Discussion on planning design of Qiubei County Magnolia Park. *For. Invent. Plan.* **2004**, *29*, 32–34. (In Chinese)
66. Yang, Y.M.; Tian, K.; He, S.J. (Eds.) Magnoliaceae. In *Study on the Scientific Survey of Wenshan National Nature Reserve in China*; Science Press: Beijing, China, 2008; pp. 481–484. (In Chinese with English subtitle/abstract, Chinese and Latin plant names)

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