

14. DYSOXYLUM Blume, Bijdr. 172. 1825.

槲木属 *jian mu shu*

Peng Hua (彭华); David J. Mabberley

Trees or very rarely shrubs, usually dioecious. Leaves in spirals or rarely opposite, pinnate; leaflets alternate, subopposite, or alternate, petiolulate, not always an equal number on each side of rachis; leaflet blade base usually oblique, margin usually entire, very rarely serrulate. Flowers appearing bisexual, 4- or 5-merous, in axillary thyrses, rarely spikes, sometimes borne on older branches or bole. Calyx cup-shaped, 4- or 5-lobed or of 4 or 5 free sepals. Petals 4 or 5, oblong, valvate or apex ± imbricate in bud, free or sometimes basally adnate to staminal tube. Staminal tube cylindrical, slightly shorter than petals, apex often lacinate or crenate; anthers 8–10, included in apex of filament tube. Disk tubular, as high or higher than ovary (rarely shorter), margin entire or crenate. Ovary (3 or)4- or 5-locular, with 1 or 2 ovules per locule; style ± as long as filament tube; stigma usually disciform. Capsule globose or pyriform, splitting into (3 or)4 or 5 segments, with 1 or 2 seeds per valve. Seeds arillate or not; hilum often large; cotyledons fleshy.

About 80 species: tropical Asia, tropical and subtropical Australia, Pacific islands; 11 species (one endemic) in China, with two insufficiently known species (not included in the key).

- 1a. Terminal leaflet absent, small “spike” or scar almost always present.
 - 2a. Apical bud with young leaves like clenched fists.
 - 3a. Leaflets not markedly shiny above; petals 4 1. *D. excelsum*
 - 3b. Leaflets shiny above; petals (4 or)5 2. *D. hongkongense*
 - 2b. Apical bud with young leaves spikelike or stiletto-shaped.
 - 4a. Leaflets with 25–30 veins either side of midvein 6. *D. grande*
 - 4b. Leaflets with 8–12 veins either side of midvein.
 - 5a. Leaflets 5–11; petals 6–8 mm; staminal tube pubescent on both surfaces 3. *D. gotadhora*
 - 5b. Leaflets 5 or 6; petals 5–6 mm; staminal tube glabrous within 5. *D. pallens*
- 1b. Terminal leaflet present.
 - 6a. Inflorescences only axillary.
 - 7a. Leaves with up to 23 leaflets; petals 4; fruit usually 4-valved 7. *D. mollissimum*
 - 7b. Leaves with up to 9 leaflets; petals 5; fruit usually 5-valved 8. *D. arborescens*
 - 6b. Inflorescences on branches or bole (sometimes axillary too).
 - 8a. Calyx ca. 1 cm 11. *D. parasiticum*
 - 8b. Calyx less than 5 mm.
 - 9a. Petals 5 4. *D. lenticellatum*
 - 9b. Petals 4.
 - 10a. Innovations merely pubescent; fruit with dense trichomes 9. *D. densiflorum*
 - 10b. Innovations with dense trichomes; fruit subglabrous 10. *D. cumingianum*

1. *Dysoxylum excelsum* Blume, Bijdr. 176. 1825.

槲木 *jian mu*

Dysoxylum gobara (Buchanan-Hamilton) Merrill; *D. procerum* Hiern; *Epicharis procer* (Hiern) Pierre; *Guarea gobara* Buchanan-Hamilton.

Trees to 13 m tall. Branchlets brown to reddish brown, glabrous; apical buds with leaves like clenched fists. Leaves 40–60 cm, even-pinnate; leaflets usually 7 or 9, alternate; petiolules ca. 1 cm; leaflet blades elliptic to oblong, (9–)25–35 × (5–)8–15 cm, thickly papery to thinly leathery, both surfaces glabrous, not markedly shiny above, secondary veins 11–16 on each side of midvein, abaxially protruding, and adaxially slightly impressed, base ± oblique and cuneate to slightly rounded, apex acute. Thyrses axillary, ± as long as leaves, glabrous or sparsely pubescent; branches spreading, basal ones 20–35 cm. Flowers 7–10 mm. Calyx 4-lobed at first but subsequently 4-parted, outside puberulent. Petals 4, white, linear to narrowly elliptic, 6–10 × 2–3 mm, outside puberulent,

inside glabrous. Staminal tube glabrous on both surfaces, apical margin entire or shortly crenate; anthers 8, oblong. Disk cylindrical, ca. 2 × as high as ovary, ciliate, outside smooth, inside with inverted trichomes, apex 8-lobed. Ovary conic, 4-locular, with long thick trichomes, with 2 ovules per locule; style several times longer than ovary, basal part with long thick trichomes. Capsule globose to pyriform, ca. 3.5 × 3.5–4 cm, glabrous, apex concave. Seeds with bright red testa. Fl. Sep–Nov, fr. Apr–Jun.

Rain forests in mountainous ravines, evergreen broad-leaved forests, sparse forests; 100–1000 m. SW Guangxi, SE Xizang (Médog), S and SE Yunnan [Bhutan, NE India, Indonesia, Laos, Nepal, Papua New Guinea, Philippines, Sri Lanka, Thailand, Vietnam; Pacific islands (Solomon Islands)].

2. *Dysoxylum hongkongense* (Tutcher) Merrill, Lingnan Sci. J. 13: 33. 1934.

香港槲木 *xiang gang jian mu*

Chisocheton hongkongensis Tutcher, J. Linn. Soc., Bot.

37: 64. 1905; *C. erythrocarpus* Hayata & Kanehira (1938), not Hiern (1875); *C. kanehirae* Sasaki; *C. kusukusensis* Hayata; *Dysoxylum kanehirae* (Sasaki) Kanehira & Hatusima; *D. kusukusense* (Hayata) Kanehira & Hatusima.

Trees 8–25 m tall. Young branches yellow pubescent to nearly glabrous; apical buds with leaves like clenched fists. Leaves 20–30(–50) cm or more, even-pinnate; leaflets 7–18, opposite, subopposite, or alternate, shiny above; petiolules 1–10 mm; leaflet blades narrowly elliptic to ovate, 7–15(–18) × 3–6.5 cm, usually subleathery, both surfaces glabrous, midvein abaxially protruding and adaxially slightly impressed, secondary veins 8–15 on each side of midvein, abaxially protruding and adaxially flat, base oblique and cuneate to rounded, apex obtuse, acute, shortly acuminate. Thyrses in upper leaf axils, 12–25 cm, appressed yellowish gray pubescent. Pedicel 2–4(–10) mm, stout, brownish pubescent. Calyx cup-shaped, (4 or)5-lobed, outside pubescent. Petals (4 or)5, white, narrowly elliptic, 5–6(–8) × ca. 2 mm, outside usually appressed rufous pubescent. Staminal tube 4–6.5 mm, outside sometimes covered with trichomes, apically margin truncate to undulate-crenulate; anthers 8, linear-oblong, included. Disk tubular, ca. 3 mm high, with crenations, apex brilliantly yellow ciliate. Ovary 3- or 4-locular, covered with dense yellow filiform trichomes, at least at base; style glabrous. Capsule pyriform to ellipsoid or globose, ca. 4 cm in diam. Seeds brown, narrowly ellipsoid, to 2.5 cm. Fl. May–Dec, fr. Nov–Jun.

• Forests on mountains; low to middle elevations. Guangdong, Guangxi, Hainan, Taiwan, S Yunnan.

This species is very closely allied to *Dysoxylum alliaceum* (Blume) Blume, a widespread and variable species of Malesia.

The timber is light and soft and usually used as construction and furniture material.

3. *Dysoxylum gotadhora* (Buchanan-Hamilton) Mabblerley, **comb. nov.**

红果榿木 hong guo jian mu

Basionym: *Guarea gotadhora* Buchanan-Hamilton, Mem. Wern. Nat. Hist. Soc. 6: 307. 1 Jan 1832; *Dysoxylum binectariferum* (Roxburgh) J. D. Hooker ex Hiern; *D. cupuliforme* H. L. Li; *D. grandifolium* H. L. Li (1944), not Merrill (1905); *G. binectarifera* Roxburgh (not before 14 Jan 1832).

Trees 8–20 m tall. Young branches pubescent or glabrescent; apical bud spikelike or stiletto-shaped. Leaves 20–30(–40) cm, even-pinnate; petiole and rachis ± 4-sided; leaflets 5–11, alternate; petiolules 3–8 mm; leaflet blades oblong, oblong-elliptic, or lanceolate, 8–16(–23) × 4–7(–15) cm, papery to thickly papery, both surfaces glabrous, secondary veins 9–14 on each side of midvein, base oblique and cuneate to ± rounded, apex acuminate (sometimes shortly). Thyrses axillary, much shorter than leaves; short branches pulverulent pubescent. Pedicel 2–4 mm, pulverulent pubescent. Calyx cup-shaped, leathery, pulverulent pubescent, 4-lobed, lobes triangular. Petals 4, yellow, oblong, 6–8 × 2–4 mm, both surfaces pulverulent pubescent. Staminal tube cylindrical, free from petals, outside and inside pubescent, mouth 8-lobed; anthers 8, alternate with

lobes, oblong, included in staminal tube with only apical tip slightly protruding. Disk cylindrical, ± as high as ovary, apex 8–10-crenate. Ovary densely grayish white pubescent; style cylindrical, basally grayish white pubescent, apically glabrous; stigma globose to oblate, glabrous. Capsule obovoid, pyriform, or subglobose, 4.5–5 × 3–4 cm, glabrous. Seeds 4, red when mature. Fl. Mar–Jul, fr. May–Nov.

Dense forests in mountainous ravines; 500–1700 m. Hainan, S Yunnan [Bhutan, India, Laos, Nepal, Thailand, Vietnam].

Dysoxylum ficiforme (Wight) Gamble of S India and Sri Lanka may belong here.

The hard, compact timber is used for making furniture and carts.

4. *Dysoxylum lenticellatum* C. Y. Wu in H. Li, Fl. Yunnan. 1: 251. 1977.

皮孔榿木 pi kong jian mu

Trees 10–30 m tall, sometimes deciduous. Young branches brownish gray when dry, puberulent, with small lenticels, leaf scars obvious. Leaves alternate, odd-pinnate; petiole and rachis 25–30 cm, puberulent, with lenticels; leaflets 9 or 11, opposite; petiolules 5–8 mm; leaflet blades ovate, elliptic, or oblanceolate, 6–7 × 2.8–4.2 cm for basal leaflets and 15–20(–25) × 4–7 cm for apical leaflets, membranous to papery, both surfaces glabrous, base ± oblique and rounded to cuneate, apex shortly acuminate. Thyrses arising from old and second-year branches, 3–5-fascicled, rarely solitary, 5–7 cm, brown pubescent, sessile; branches 4–5 cm, with bractlets. Flowers ca. 1 cm in diam. Pedicel ca. 5 mm, slender, gray pubescent. Calyx cup-shaped, less than 5 mm, ca. 3 mm in diam., 5-parted, outside densely tomentose. Petals 5(or)6, white, 6–7 × 1.5–2 mm, outside puberulent. Staminal tube urceolate, 4–5 mm, glabrous, basal part ca. 3 mm wide, mouth ca. 5 mm wide, apical margin undulate; anthers 10(–12), ovoid, inserted on inner side of tube mouth, alternating with and as long as tube lobes. Disk annular, ca. 1 mm high, fleshy, most of it adnate with ovary. Ovary puberulent; style puberulent; stigma as long as staminal tube, puberulent. Fl. Feb–Apr.

Ravine rain forests, mixed evergreen broad-leaved and deciduous forests near streams in limestone regions; 900–1400 m. S and SE Yunnan (Funing, Jingdong, Xishuangbanna) [Myanmar, Thailand].

5. *Dysoxylum pallens* Hiern in J. D. Hooker, Fl. Brit. India 1: 548. 1875.

少花榿木 shao hua jian mu

Dysoxylum spicatum H. L. Li.

Trees to 7 m tall. Branchlets brown, with longitudinal stripes, densely pubescent; apical buds spikelike or stiletto-shaped. Leaves in spirals, even-pinnate; petiole and rachis 15–30 cm, ribbed, pubescent; leaflets 5 or 6, alternate; petiolules 2–8 mm, densely puberulent; leaflet blades ovate to elliptic, 10–13 × 4–5 cm for basal ones and 14–20 × 6–7 cm for apical ones, membranous, both surfaces glabrous, abaxially with fine mamillate tubercles, secondary veins 8–12 each side of midvein and abaxially ± prominent, base nearly rounded to broadly cuneate, apex acuminate. Thyrses axillary, racemose,

1–3 cm, pulverulent yellow pubescent, few flowered. Pedicel 2–3 mm, pulverulent pubescent; bracteoles small, pulverulent pubescent. Calyx cup-shaped, almost truncate, outside pulverulent pubescent. Petals 4, 5–6 mm, both surfaces pulverulent pubescent. Staminal tube ca. 4 × 3 mm, outside pulverulent pubescent, inside glabrous, apical margin 8-lobed; anthers 8, alternate with tube lobes, oblong. Disk annular, ca. 1 mm high, glabrous, margin undulate. Ovary and style covered with long thick trichomes; stigma subcapitate, pulverulent pubescent. Fruit often solitary, young fruit yellowish green, globular-pyriform, carpodium stout, base of fruit with persistent calyx. Fl. Mar–Jul.

Dense and moist forests; 1200–1400 m. Hainan, Yunnan [Bhutan, Cambodia, India, Myanmar, Thailand].

This species is perhaps conspecific with *Dysoxylum cyrtobotryum* Miquel, a widespread species of Malesia to the Solomon Islands.

“*Dysoxylum oliganthum*” (C. Y. Wu, Fl. Yunnan. 1: 247. 1977) belongs here but was not validly published because two gatherings were indicated as types (*Vienna Code*, Art. 37.2).

6. *Dysoxylum grande* Hiern in J. D. Hooker, Fl. Brit. India 1: 547. 1875.

多脉槲木 duo mai jian mu

Dysoxylum lukii Merrill; *D. lukii* var. *paucinervium* F. C. How & T. C. Chen.

Trees 4–12(–15) m tall. Branchlets densely yellowish pubescent; older branches gray pubescent; apical buds spikelike or stiletto-shaped. Leaves in spirals, scattered, ca. 60 cm, even-pinnate; petiole and rachis densely pubescent; leaflets 9–15, usually alternate; leaflet blades lanceolate or oblong, 10–30 × 3–9 cm, papery, abaxially yellowish villous, adaxially densely pubescent on midvein and otherwise sparsely pubescent, secondary veins 25–30 on each side of midvein, spreading but anastomosing near margin, abaxially conspicuously prominent and adaxially concave, base usually oblique with one side rounded and other side cuneate, apex acuminate. Thyrses axillary, ca. 20 cm, many branched, yellowish pubescent. Flowers 4-merous. Pedicel 4 mm or more. Calyx nearly disciform, ca. 2.5 mm in diam., outside pubescent, apex inconspicuously lobed. Petals linear-oblong, 6–7 × 2(or less) mm, outside pubescent. Staminal tube cylindrical, ca. 5 mm, glabrous, margin serrulate; anthers 8, oblong, ca. 1 mm, included. Disk annular, ca. 1 mm high, glabrous, apex crenate. Ovary densely yellow pubescent; style 3–4 mm, slender, basally villous. Capsule obovoid-globose to pyriform, ca. 4 × 3 cm or wider, wrinkled when dry, glabrous. Seeds obovoid, with thick sarcotesta. Fl. May–Jul and Sep–Nov, fr. Oct–Nov and Mar–Apr.

Forests in mountainous regions; middle elevations. Guangdong, Guangxi, Hainan, S Yunnan [Bhutan, NE India, Indonesia, Malaysia, Thailand, Vietnam].

7. *Dysoxylum mollissimum* Blume, Bijdr. 175. 1825.

海南槲木 hai nan jian mu

Dysoxylum filicifolium H. L. Li; *D. hainanense* Merrill; *D.*

hainanense var. *glaberrimum* F. C. How & T. C. Chen; *D. mollissimum* var. *glaberrimum* (F. C. How & T. C. Chen) P. Y. Chen.

Trees 7–10(–20) m tall. Branchlets puberulent; apical buds with leaves like clenched fists. Leaves alternate, 25–30(–45) cm, odd-pinnate; petiole and rachis glabrous or villous; leaflets 20–23, opposite to subopposite; petiolules 3–5 mm, glabrous or pubescent; leaflet blades oblong to oblong-lanceolate, 5–11(–13) × 2–3.5(–4.5) cm, membranous, abaxially glabrous or sparsely villous but densely villous on midvein and secondary veins, adaxially glabrous or densely pubescent only on midvein, secondary veins 12–15 on each side of midvein and outspreading, base oblique, apex acuminate. Thyrses axillary, ca. 18 cm or more, lax and with a few scattered flowers, nearly glabrous to sparsely pubescent; branches few, sparse, ca. 5 cm at base of thyrses. Flowers 4-merous, ca. 9 mm. Pedicel 1–2 mm, pubescent. Calyx disciform, ca. 2 mm in diam., pubescent, lobes round. Petals yellow, linear to spatulate, ca. 8.5 mm, glabrous, apex obtuse. Staminal tube cylindrical, ca. 7 mm, both surfaces white villous, apical margin crenate; anthers 8. Disk cylindrical, ca. 3 mm high, margin ciliate and crenate. Ovary densely villous; style 7–8 mm. Capsule yellow when dry, globose, 1.6–2 cm in diam.; pericarp thin and flexible. Fl. May–Sep and Jan–Feb, fr. Oct–Nov and Mar–Apr.

Forests and ravines in mountainous regions; low to middle elevations. Guangdong, Guangxi, Hainan (Qiongzong), S Yunnan [Bhutan, India (Assam), Indonesia, Malaysia, Myanmar, Philippines].

The plants in China are *Dysoxylum mollissimum* subsp. *mollissimum*. *Dysoxylum mollissimum* subsp. *molle* (Miquel) Mabberley occurs in E Australia, Indonesia, Pacific islands, and Papua New Guinea.

8. *Dysoxylum arborescens* (Blume) Miquel, Ann. Mus. Bot. Lugduno-Batavi 4: 24. 1868.

兰屿槲木 lan yu jian mu

Goniocheton arborescens Blume, Bijdr. 177. 1825.

Trees to 20(–30) m tall. Bark smooth to finely cracked, lenticellate. Twigs slender, prominently lenticellate; apical buds with leaves like clenched fists. Leaves in spirals, to 45 cm, odd-pinnate; petiole glabrous, drying blackish, base swollen; leaflets 5–9; petiolules to 6 mm; leaflet blades elliptic to obovate, 8.5–18 × 3–7 cm, papery to somewhat leathery, glabrous, base cuneate, sometimes ± asymmetric, apex conspicuously acuminate with acumen to 1.2 cm, secondary veins 7 or 9(or 10) on each side of midvein. Thyrses ± axillary, 2–8(–25) cm, tawny puberulent, branches to 5(–12) cm. Calyx shallowly cupular, 3–6 mm, fawn-colored pubescent, margin irregularly 5-lobed. Petals (4 or)5(or 6), whitish, 7–10 × 1.8–2.2 mm, usually glabrous. Staminal tube truncate to weakly crenulate, sparsely pubescent outside; anthers 10, ca. 1 mm, inserted near margin. Disk 1–1.5 mm high, inside pubescent, margin crenulate. Ovary (3 or)4- or 5-locular, with 2 collateral ovules per locule; style pubescent in proximal 2/3. Capsule to 3 cm in diam., flattened globose, (3–)5-valved, bright pinkish red, glabrous. Seeds 1–6, ca. 1.8 × 1.5 cm, planoconvex with bright orange sarcotesta.

Taiwan (Lan Yu) [Indonesia, Malaysia, Papua New Guinea, Philippines; Australia, Indian Ocean islands, Pacific islands].

9. *Dysoxylum densiflorum* (Blume) Miquel, Ann. Mus. Bot. Lugduno-Batavi 4: 9. 1868.

密花槲木 mi hua jian mu

Epicharis densiflora Blume, Bijdr. 167. 1825.

Trees to 25 m tall, evergreen. Bark exfoliating, endodermis yellowish. Young shoots pubescent. Leaves alternate, 35–46 cm, odd-pinnate; rachis densely yellow pubescent; leaflets 7–15, opposite to subopposite; petiolules 4–6 mm, densely pubescent; leaflet blades oblong but apical one obovate-oblong, 9–16 × 3–6 cm, papery, abaxially densely pubescent along veins, adaxially only on midvein, secondary veins 10–14 on each side of midvein, base oblique, apex acuminate to shortly acuminate. Thyrses on older branches and sometimes axillary, solitary or 2- or 3(–10)-conglomerate, 5–9 cm, rachis densely pubescent. Flowers yellowish, 8–10 mm. Pedicel 2–4 mm, densely pubescent. Calyx cup-shaped, 3–4 mm, 4-lobed; lobes triangular, outside sparsely pubescent, inside glabrous. Petals 4. Staminal tube 6–8 × ca. 2 mm, both surfaces sparsely pubescent, margin 8-lobed, each lobe tip 2-cleft as 2 teeth; anthers 8, slightly included within tube. Disk tubular to urceolate, ca. 2 mm high, glabrous, apex undulate. Ovary included in disk, densely covered with thick trichomes, 4-locular; style ca. 8 mm, sparsely villous; stigma peltate. Capsule yellowish green, ellipsoid to obovoid, 4–6 × 2.5–4 cm;

pericarp densely covered with pulverulent yellow trichomes. Seeds bright red, with a salmon-colored aril. Fl. Apr and Sep, fr. Apr–May and Oct–Nov.

Seasonal rain forests in ravines; 500–800 m. S Yunnan (Jinghong, Mengla) [Indonesia, Malaysia, S Myanmar, Thailand].

10. *Dysoxylum cumingianum* C. Candolle, Monogr. Phan. 1: 497. 1878.

肯氏槲木 ken shi jian mu

Trees, medium sized. Young branches densely covered with thick trichomes, glabrescent. Leaves in spirals, ca. 30 cm, odd-pinnate; leaflets 7–9, opposite or alternate; leaflet blades elliptic to ovate-elliptic, (5–)12–16 × (3–)5–6 cm, membranous, yellowish gray when dry, abaxially densely puberulent along midvein and secondary veins, adaxially glabrous, secondary veins 12–14 on each side of midvein and abaxially ± prominent, base oblique and cuneate to sometimes rounded, apex obtuse to acute. Thyrses linear, ± as long as petioles, ca. 8 cm, densely covered with yellow thick trichomes, borne on older branches and sometimes also axillary. Calyx kettlelike, ca. 2.5 mm, membranous, outside with dense thick trichomes, 4-lobed. Petals 4, linear to elongate-elliptic, ca. 1.5 cm, membranous, apex covered with yellow small trichomes. Staminal tube glabrous; anthers 8, narrowly ellipsoid. Disk cylindrical, outside glabrous, inside covered with trichomes. Ovary 4-locular, densely yellow villous, with 1 ovule per locule; style ± as long as filament tube, middle part pilose. Capsule globose, 2–2.5 cm in diam., subglabrous, valvate with 4 or 5 segments.

Near sea level to 400 m. Taiwan (Lan Yu) [Indonesia, Malaysia, Philippines].

11. *Dysoxylum parasiticum* (Osbeck) Kostermans, Reinwardtia 7: 247. 1966.

大花欒木 da hua jian mu

Melia parasitica Osbeck, Dagb. Ostind. Resa 278. 1757;
Dysoxylum leytense Merrill.

Trees to 27(–32) m tall. Branchlets pubescent, glabrescent. Leaves 15–150 cm; rachis glabrous; leaflets 6 or 7 pairs, opposite to subopposite; petiolules 1–3 mm; leaflet blades oblong-elliptic, 11–15 × 3–5 cm, papery, abaxially densely puberulent along midvein and secondary veins, adaxially glabrous, secondary veins 14 on each side of midvein, base ± oblique, apex shortly acuminate. Inflorescences caespitose, arising from old

branches or trunk, extremely short, sometimes racemelike; peduncle often less than 1 cm. Pedicel 7–8 mm. Calyx goblet-shaped, ca. 1 cm, densely covered with very small spots, glabrous, 4-lobed; lobes broadly ovate, 2–5 mm, irregular, apex obtuse. Petals 4, oblong, ca. 2.5 cm × 3–4 mm, apex thickened and densely pubescent. Staminal tube free from petals, ca. 2 cm × 3.5–4 mm, outside glabrous, inside ± villous, apical margin 8-lobed; anthers 8, sessile, alternating with lobes. Disk ca. 3 mm high, truncate, glabrous. Ovary villous; style base villous. Fruit nearly globose when mature, 4–6 cm in diam.

Taiwan (Lan Yu) [Indonesia, Malaysia, Papua New Guinea, Philippines; NE Australia, Pacific islands (Solomon Islands)].

Insufficiently known species

The following two species are known only from inadequate material and need re-collecting to ascertain their identity.

Dysoxylum laxiracemosum C. Y. Wu & H. Li in H. Li, Fl. Yunnan. 1: 246. 1977.

总序欒木 zong xu jian mu

Trees 10–12 m tall, to 35 cm d.b.h. Young branches brown when dry, with many longitudinal stripes, glabrous. Petiole and rachis 17–44 cm, glabrous; leaflets 9–13, alternate; petiolules 1–1.5 cm, glabrous; leaflet blades elliptic to oblong, (9–)18–22 × 5–8.5 cm, thickly papery, both surfaces glabrous, secondary veins 13 or 14 on each side of midvein, abaxially prominent and adaxially flat, base rounded to broadly cuneate, apex acuminate. Inflorescences axillary, racemose, ca. 30 cm, glabrous, branches sparse and 1–2 cm from base to apex, basal branches with 6 or 7 flowers but fewer on apical branches, only flowers on apical part of panicle developing into fruits. Flowers with 1 conical bracteole. Pedicel 2–3 mm, pubescent. Calyx shallowly cup-shaped, pubescent, 5-lobed, lobes broadly triangular. Corolla not seen. Mature infructescences ca. 34 cm. Fruit reddish yellow, oblate, ca. 3.5 × 4 cm, with sparse long appressed filamentous yellow trichomes when young but glabrescent at maturity. Seeds 2–4, with a red aril. Fl. Feb–Mar, fr. May.

• Dense ravine rain forests; 600–900 m. S Yunnan (Xishuangbanna).

Dysoxylum medogense C. Y. Wu & H. Li, Acta Phytotax. Sin. 18: 111. 1980.

墨脱欒木 mo tuo jian mu

Trees to 30 m tall. Young branchlets brown; old branches ± shiny, with fawn-colored lenticels. Petiole and rachis 10–20 cm, puberulent; leaflets 5–9, opposite to subopposite; leaflet blades elliptic, ca. 5 × 2.5 cm for basal ones and ca. 15 × 5 cm for apical ones, papery, abaxially sparsely pubescent but midvein densely yellow pubescent, adaxially densely yellowish pubescent on midvein, secondary veins 8–15 on each side of midvein, base rounded to broadly cuneate, apex acute to caudate-acuminate. Flowers not seen. Infructescences axillary, racemose, 4–30 cm. Young fruit with hazel pubescence; fruit nearly globose, 2–2.5 × 3–3.5 cm, glabrous, 5-locular, with channels between locules, loculicidal, carpodium 1–2 cm, calyx persistent, crenate. Seeds 1 per locule, with red aril.

• Broad-leaved forests, forest margins; 800–900 m. SE Xizang (Médog).

