
暗罗属 an luo shu

Li Bingtao (李秉滔 Li Ping-tao); Michael G. Gilbert

Trees or shrubs. Inflorescences axillary, internodal, or leaf-opposed, sessile or shortly pedunculate, 1- to many flowered. Flowers usually bisexual. Sepals 3, usually small, valvate or rarely subimbricate in bud, free. Petals 6, in 2 whorls, free, valvate or rarely subimbricate in bud, subequal, flat and spreading; inner petals sometimes slightly larger or smaller than outer, concave and arched over stamens. Stamens usually many; anther locules connate; connectives apically orbicular or rhomboidal, concealing anther locules, apex flat-topped or slightly convex. Carpels rather few to many, free; ovules 1 or 2(or 3) per carpel, basal or sratual; styles absent, very short, or long; stigmas mostly dilated. Fruit apocarpous; monocarps few to many, short to long stipitate, mostly globose or ovoid, fleshy. Seeds 1 or 2(or 3) per monocarp, with a longitudinal circumferential groove.

About 120 species: Old World tropics from Africa to the W Pacific, with the center of distribution in SE Asia; 17 species (six endemic, one introduced) in China.

Molecular data (Mols et al., Amer. J. Bot. 91: 590–600. 2004) have shown that Polyalthia as traditionally delineated is polyphyletic and will eventually have to be divided among several genera.

Key to flowering material

1a. Inner petals 0.2–1 cm.
   2a. Petals 6–9 cm .......................................................................................................................... 8. P. cerasoides
   2b. Petals 2–2.5 mm.
      3a. Leaf blade leathery, glabrous; carpels at least partly hairy .................................................. 9. P. littoralis
      3b. Leaf blade membranous to papery, adaxially minutely hairy along midrib; carpels glabrous or pubescent.
         4a. Inner petals ca. 3.5 mm; carpels ca. 7, glabrous ................................................................. 10. P. florulenta
         4b. Inner petals ca. 10 mm; carpels many, pubescent.
            5a. Leaf blade 5–11 × 2–4 cm, secondary veins inconspicuous; stigmas glabrous ............. 12. P. suberosa
            5b. Leaf blade 13.5–24 × 4–5 cm, secondary veins raised; stigmas villous ......................... 15. P. lancilimba
      3a. Leaf blade leathery, glabrous; carpels at least partly hairy .................................................. 9. P. littoralis
   1b. Inner petals (1–)1.3–9 cm.
      6a. Petals 6–9 cm.
         7a. Sepals ca. 12 mm .............................................................................................................. 2. P. litseifolia
         7b. Sepals 3–5 mm .................................................................................................................... 17. P. liukiuensis
      6b. Petals (1–)1.3–5.5 cm.
      8a. Petals 0.6–3 cm wide.
         9a. Leaf blade secondary veins 24–28 on each side of midvein .............................................. 7. P. pingniensensis
         9b. Leaf blade secondary veins 7–18 on each side of midvein.
            10a. Petiole puberulent; leaf blade secondary veins 7–10 on each side of midvein; inflorescences several flowered; petals 2–3.5 × 1–1.5 cm ................................................................. 11. P. laui
            10b. Petiole glabrous; leaf blade secondary veins 14–18 on each side of midvein; inflorescences 1-flowered; petals 3–5.5 × 1.5–3 cm ............................................................................. 16. P. rumpii
      8b. Petals 0.2–0.5 cm wide.
         11a. Pedicel 1–1.8 cm; petals white, 1–1.3 cm .............................................................................. 14. P. obliqua
         11b. Pedicel 2–4 cm; petals green to yellow, 1.3–3.8(–5) cm.
            12a. Leaf blade margin undulate, secondary veins 18–24 on each side of midvein ................... 13. P. longifolia
            12b. Leaf blade margin not undulate, secondary veins 13–20 on each side of midvein.
               13a. Petals densely minutely hairy, to 3.8(–5) cm ............................................................... 4. P. fragrans
               13b. Petals glabrous or only very sparsely hairy on inside, 1.3–3.5 cm.
                  14a. Leaf blade with pellucid dots; ovaries pubescent and with 1 basal ovule .......... 5. P. similars
                  14b. Leaf blade without pellucid dots; ovaries glabrous and with 2 ovules.
                     15a. Branches and leaf midvein and secondary veins pubescent; leaf blade 18–28 × 5–8.5 cm, smooth; petals ca. 3 cm ......................................................... 6. P. viridis
                     15b. Branches and leaf midvein and secondary veins glabrous; leaf blade 9–17 × 2.5–5 cm; petals ca. 1.3 cm.
                        16a. Leaf blade membranous, densely verrucate, secondary veins 15–18 on each side of midvein, apex acuminate .............................................. 1. P. verrucipes
                        16b. Leaf blade thinly papery, not verrucate, secondary veins 8–10 on each side of midvein, apex caudate .............................................................. 3. P. chinensis
### Key to fruiting material (not seen for *P. lancilimba*)

1a. Monocarps 0.5–0.8 cm, spherical.
   2a. Monocarp stipes 1.5–2 cm ........................................................................................................ 8. *P. cerasoides*
   2b. Monocarp stipes 0.3–1 cm.
      3a. Monocarps to 7, stipes 3–4.5 mm ......................................................................................... 10. *P. florulenta*
      3b. Monocarps to 18, stipes 8–10 mm .................................................................................... 12. *P. suberosa*

1b. Monocarps 1–5 cm, globose, ovoid, or cylindric.
   4a. Monocarps globose, densely minutely verrucate .............................................................. 14. *P. obliqua*
   4b. Monocarps ovoid or cylindric, smooth or more coarsely verrucose.
      5a. Monocarps 1–1.5 cm.
         6a. Leaf blade secondary veins 24–28 on each side of midvein, parallel ....................... 7. *P. pingianiensis*
         6b. Leaf blade secondary veins 7–13 on each side of midvein, aracely ascending.
            7a. Monocarp stipes 0.2–0.5 cm .................................................................................... 9. *P. littoralis*
            7b. Monocarp stipes 1–7 cm ...................................................................................... 16. *P. rumphii*
      5b. Monocarps 1.7–5 cm.
         8a. Young stems glabrous.
            9a. Pedicel 0.5–0.7 cm; petals ca. 1.3 cm; monocarp stipes 0.5–0.7 cm.
               10a. Leaf blade membranous, densely verrucate, secondary veins 15–18 on each side of
                   midvein, apex acuminate ........................................................................................... 1. *P. verrucipes*
               10b. Leaf blade thinly papery, not verrucate, secondary veins 8–10 on each side of midvein,
                   apex caudate ............................................................................................................. 3. *P. chinensis*
            9b. Pedicel 2–3.5 cm; petals 2.2–9 cm; monocarp stipes 1–7 cm.
               11a. Leaf blade secondary veins 10–16 on each side of midvein ........................................ 2. *P. litseifolia*
               11b. Leaf blade secondary veins 8 or 9 on each side of midvein ........................................ 17. *P. liukiuensis*
      8b. Young stems hoary or minutely hairy.
         12a. Monocarp stipes 1–2 cm .............................................................................................. 13. *P. longifolia*
         12b. Monocarp stipes 2.5–5 cm.
            13a. Young branches hoary; monocarps hoary ................................................................. 4. *P. fragrans*
            13b. Young branches pubescent or puberulent; monocarps glabrous.
                14a. Leaf blade with pellucid dots, membranous to papery ........................................ 5. *P. simiarum*
                14b. Leaf blade without pellucid dots, thinly leathery to leathery.
                   15a. Leaf blade 18–28 cm, secondary veins pubescent ................................................... 6. *P. viridis*
                   15b. Leaf blade 8–20 cm, secondary veins glabrous .......................................................... 11. *P. laui*


### 疙叶暗罗 you ye an luo

Trees to 12 m tall. Branches grayish black, glabrous. Petiole 3–7 mm, with transverse striations; leaf blade oblong to oblong-lanceolate, 10–17 × 2.5–5 cm, membranous, both surfaces glabrous and densely verrucate, midvein abaxially elevated and adaxially flat, secondary veins 15–18 on each side of midvein, delicate, and prominent on both surfaces, base broadly cuneate to obtuse, apex acuminate. Inflorescences axillary, 1- or 2-flowered. Pedicel 5–8 mm; bracteoles at middle and base, ovate to semiorbicular. Sepals orbicular to broadly ovate, apex rounded. Petals yellowish, linear-lanceolate, 13 × 2–3 mm, membranous, glabrous; outer petals larger than inner petals. Stamens numerous; connectives slightly convex. Carpels 10–15, oblong, glabrous; ovary with 2 basal ovules; stigma ovoid. Fruiting pedicel 5–7 × ca. 3 mm; monocarp stipes 5–8 mm, verrucate; monocarps ovoid, 2.5–2–1.5 cm, glabrous. Seed 1 per monocarp, yellowish, ovoid, 18–20 × 8–11 mm. Fr. Apr–Jul.

- Densely forested slopes; 1000–1900 m. S Yunnan.

*Polyalthia verrucipes* is listed as Endangered (EN A2c) by the **IUCN Red List of Threatened Species** (Version 2010.3; http://www.iucnredlist.org; accessed on 7 Oct 2010).


### 木姜叶暗罗 mu jiang ye an luo

Trees to 40 m tall. Bark grayish brown. Branches brown, glabrous. Petiole 6–10 mm, adaxially furrowed, glabrous, [with axillary bud at base]; leaf blade elliptic to broadly elliptic, 9–20 × 4.5–8 cm, membranous to subleathery, both surfaces glabrous and densely papillose, secondary veins 10–16 on each side of midvein, reticulate veins elevated on both surfaces, base rounded to broadly cuneate, apex shortly acuminate to obtuse. Inflorescences axillary, 1-flowered. Pedicel 2–3.5 cm, glabrous. Sepals triangular-lanceolate, ca. 12 mm, outside puberulent, inside glabrous. Petals broadly linear, 6–9 × 0.7–1.1 cm, subequal, glabrous, margin slightly revolute, with a midrib and 2–4 parallel secondary veins. Stamens many, ca. 1.5 mm; connectives apically truncate. Carpels 5 or 6, glabrous; ovules 3 per carpel; stigmas clavate, puberulent. Monocarp stipes 1–3 cm; monocarps oblong to ovoid, 3–3.5 × 2–2.5 cm, constricted between seeds, glabrous, verrucose. Seeds 3 per monocarp. Fr. Apr–Jul, fr. May–Sep.

- Sparsely forested slopes, moist valleys; ca. 600 m. S Yunnan.
Trees to 10 m tall. Bark grayish white. Branches gray, with many lenticellate and irregular stripes. Petiole ca. 5 mm; leaf blade oblong-elliptic to obovate-lanceolate, 9–13 × 2.5–3.8 cm, thinly papery, glabrous, adaxially glossy, secondary veins 8–10 on each side of midvein, reticulate veins abaxially slightly elevated, base cuneate to broadly cuneate, apex caudate. Inflorescences axillary, 1- or 2-flowered. Pedicel ca. 7 mm; bracteoles at middle and base, semiencircling to ovate. Sepals many, oblong, glabrous. Stamens many; connectives apically rounded to subtruncate. Carpels many, oblong, glabrous; stigma slightly oblique. Carpels each with 2 ovules. Fruit near base to middle. Sepals ovate-triangular, ca. 5 × 5 mm, outside pubescent, inside glabrous. Petals yellowish green; outer petals ± longer than inner petals; inner petals linear-lanceolate to linear, 1.5–3.5 × 0.3–0.4 cm, outside puberulent, inside ± glabrous. Stamens oblong; connectives apicily broadly truncate to convex. Carpels oblong, pubescent; ovule 1 per carpel, basal; stigmas capitulate, puberulent. Fruiting pedicel 2–3 cm; monocarp stipes 3–3.5 cm, glabrous; monocarps ovoid to ovoid-ellipsoid, 2.5–3 × 1.2–1.7 cm, glabrous. Seed 1 per monocarp. Fl. Apr–Sep, fr. Jul–Dec. 2n = 14.

Forested slopes; 500–1200 m. S and SW Yunnan [Bhutan, Cambodia, India, Laos, Myanmar, C and N Thailand, Vietnam].


Trees to 25 m tall. Bark grayish white. Branches puberulent when young, glabrous and sparsely lenticellate with age. Petiole 5–10 mm, robust; leaf blade ovate-oblong, oblong, lanceolate, or oblong-lanceolate, 9–28 × 3.5–12.5 cm, membranous to papery, hialopunctate, glabrous or puberulent only on midvein, secondary veins 13–20 on each side of midvein, oblique, close-set, parallel, and prominent on both surfaces, base rounded to broadly cuneate and sometimes oblique, apex acuminate, shortly acuminate, or obtuse. Inflorescences axillary or on older or short branches, 1- to several flowered; bracts ovate, tomentulose. Pedicel obovate, 2.5–4 cm, tomentulose, bracteolate near base to middle. Sepals ovate-triangular, ca. 5 × 5 mm, outside pubescent, inside glabrous. Petals yellowish green; outer petals ± longer than inner petals; inner petals linear-lanceolate to linear, 1.5–3.5 × 0.3–0.4 cm, outside puberulent, inside ± glabrous. Stamens oblong; connectives apicily broadly truncate to convex. Carpels oblong, pubescent; ovule 1 per carpel, basal; stigmas capitulate, puberulent. Fruiting pedicel 2–3 cm; monocarp stipes 3–3.5 cm, glabrous; monocarps ovoid to ovoid-ellipsoid, 2.5–3 × 1.2–1.7 cm, glabrous. Seed 1 per monocarp. Fl. Apr–Sep, fr. Jul–Dec. 2n = 14.

Densely forested slopes; 600–1100 m. S and SW Yunnan [Thailand].


Trees to 10 m tall. Bark and branches grayish black, longitudinally striate. Branchlets glabrous. Petiole 1–1.5 cm, densely pubescent; leaf blade oblong to oblong-lanceolate, 7–18 × 2.5–5.5 cm, leathery, abaxially sparsely pubescent but denser along veins, adaxially glabrous except for pubescent midvein, midvein adaxially impressed, secondary veins 24–28 on each side

of midvein, closely parallel, and prominent on both surfaces, base attenuate to obtuse, apex shortly acuminate. Inflorescences axillary or terminal, 1- or 2-flowered. Flowers ca. 3 cm in diam. Pedicel ca. 2.5 cm, puberulent or glabrous. Sepals broadly ovate, ca. 1.3 × 1.5 cm, outside puberulent, inside glabrous. Petals elliptic to ovate, 2.5–3.5 × ca. 1.6 cm, outside puberulent, inside glabrous; inner petals oblong, 2.2–2.7 × ca. 0.9 cm. Stamens oblong-cuneate, ca. 4 mm; connectives apically rounded, pubescent. Carpels many, oblong, ca. 2.5 mm, villous; ovule 1 per carpel, basal; stigmas capitulate. Fruiting pedicel ca. 4 cm; monocarp stipes 2–4 cm, glabrous; monocarps purple, ellipsoid, ca. 1.5 × 1 mm, apex mucronate. Fl. May, fr. Oct.

- Densely forested slopes; 1000–1500 m. S Yunnan.

*Polyalthia pingpinensis* is listed as Endangered (EN A2c) by the IUCN Red List of Threatened Species (Version 2010.3; http://www.iucnredlist.org; accessed on 7 Oct 2010). The epithet has been given incorrectly as "pingpinensis" in some standard indices.


细基丸

*Uvaria cerasoides* Roxburgh, Fl. Coromandel 1: 30. 1795; *Polyalthia crassipetala* Merrill.

Trees to 20 m tall. Bark grayish black. Branchlets densely pubescent, glabrescent, lenticulate with age. Petiole 2–3 mm, sparsely hispid; leaf blade oblong, oblong-lanceolate, or sometimes elliptic, 6–19 × 2.5–6 cm, abaxially yellowish and pubescent, adaxially often bluish green when dry and glabrous except for minutely hairy midvein, secondary veins 7 or 8 on each side of midvein, base broadly cuneate to rounded, apex obtuse. Inflorescences axillary, 1-flowered. Flowers 1–2 cm in diam. Pedicel 1–2 cm, puberulent, with 1 or 2 leafy bracteoles below middle. Sepals oblong-ovate, 8–9 mm, outside pilose, apex acuminate. Petals green but black when dry, subequal or inner petals shorter than outer petals, oblong-ovate, 8–9 mm, thickly leathery, puberulent. Stamens cuneate; connectives apically truncate. Carpels oblong, pubescent; ovule 1 per carpel; stigmas ovoid, apex entire. Monocarp stipes 1.5–2 cm, weak; monocarps red but black when dry, ovoid to subglobose, ca. 6 mm in diam., glabrous. Fl. Mar–May, fr. Apr–Nov. 2n = 18.

Sparsely forested slopes; 100–1100 m. S Guangdong, S Guangxi, Hainan, S Yunnan [Indonesia, Thailand, Vietnam].

A fine strong bast fiber obtained from the inner bark of *Polyalthia cerasoides* is used to make ropes and sacks. The wood is used for farming tools and structural timbers. The flowers are very fragrant and are sometimes collected as a perfume.


陵水暗罗

*Guatteria littoralis* Blume, Fl. Javae, Amnonaceae, 99. 1830; *Polyalthia zhui* X. L. Hou & S. J. Li.

Shrubs or small trees, to 5 m tall. Branchlets dark purple, striate, appressed grayish yellow pubescent, soon glabrous. Petiole yellowish, 3–5 mm, puberulent; leaf blade oblong to oblong-lanceolate, 9–19 × 2–6 cm, leathery, glabrous, abaxially glossy pale green, adaxially dark green, often bluish green when dry, secondary veins 8–10 on each side of midvein, at 60°–80° to midrib, arcurately ascending, and anastomosing 3–5 mm from margin, base cuneate to rounded, apex acuminate to bluntly acute. Inflorescences leafflowered, 1- or 2-flowered; peduncle ca. 1 mm. Flowers 1–2 cm in diam. Pedicel to 3 mm, pubescent; bracteole 1, broadly ovate, 1–2 × ca. 2 mm, apex acuminate. Sepals triangular, ca. 2 mm, outside pubescent, apex acute. Petals white, oblong-elliptic, 6–8 mm, spreading, subequal or inner petals slightly shorter than outer petals, slightly thick, outside pubescent, apex obtuse to obtuse. Stamens many; connectives apically truncate, puberulent. Carpels 7–11(–30), puberulent; ovule 1 per carpel, basal; stigmas ovoidale, shallowly 2-cleft. Monocarp stipes 2–5 mm, puberulent; monocarps 4–7(–11), red but purplish red when dried, ovoidellipsoid, 1.5 × 0.8–1 cm, glabrous, densely minutely dotted. Seed 1 per monocarp, red, ellipsoid, 10–12 × 6–8 mm. Fl. Apr–Jul, fr. Jul–Aug.

Forest slopes, margins of wet forests, along small streams; 100–800 m. Guangdong, Guangxi, Hainan, Yunnan [Indonesia, Thailand, Vietnam].

Molecular data (Mols et al., Amer. J. Bot. 91: 598. 2004) suggest that *Polyalthia littoralis* and related species are more closely related to the genus *Marsypopetalum* Scheffer rather than *Polyalthia s.s.* "*Polyalthia caloneura,*" proposed but not validly published by X. L. Hou (http://www.abclunwen.com/lunwen-free-387606; accessed on 25 Nov 2010), belongs here. *Polyalthia zhui* was based on material with immature flowers.


小花暗罗

Shrubs ca. 2 m tall. Branchlets pubescent when young, glabrescent. Petiole 2–4 mm, pubescent; leaf blade oblong-lanceolate to oblong-elliptic, 5–14.5 × 2.3–4 cm, membranous, abaxially puberulent, adaxially glabrous except for minutely hairy midvein, secondary veins 10–13 on each side of midvein, obliquely ascending, and anastomosing near margin, base broadly cuneate, apex obtuse to acuminate. Inflorescences leafflowered, 1-flowered. Flowers ca. 0.4 cm in diam. Pedicel 1–10 mm, pubescent; bracteoles 2 at middle of pedicel, ovate-lanceolate, ca. 3.5 × 1 mm, abaxially pubescent, adaxially glabrous. Sepals ovate, ca. 2 × 2 mm, outside pubescent, inside glabrous. Petals yellowish green; outer petals ovate-lanceolate, ca. 2.5 × 1.5 mm, concave, outside pubescent, inside glabrous; inner petals ovate, ca. 3.5 × 2 mm, flat. Stamens cuneate, ca. 0.5 mm; connectives apically truncate, puberulent. Carpels ca. 7, oblong, ca. 0.9 mm, glabrous; ovule 1 per carpel, basal. Fruiting pedicel 1.5–1.5 cm; monocarp stipes 3–5 mm, pubescent; monocarps to 7, red, globose, ca. 8 mm in diam., glabrous. Fl. Dec–Feb, fr. Jun–Aug.

- Forested slopes; 1100–1400 m. S and W Yunnan.

海南暗罗

Shrubs to 25 m tall, d.b.h. to 40 cm. Bark gray. Branches pubescent when young, glabrescent. Petiole 5–8 mm, trans-
versely rugously striate, puberulent; leaf blade oblong to oblong-elliptic, 8–20 × 3.5–8 cm, thinly leathery to leathery, glabrous, adaxially shiny, secondary veins 14–18 on each side of midvein, parallel, ascending to margin, and adaxially conspicuous, base broadly cuneate to rounded, apex acuminate. Inflorescences axillary or on old branches, several flowered. Pedicel 1.5–3 cm, puberulent; bracteoles at base of pedicel, broadly ovate. Sepals broadly ovate, ca. 5 × 5 mm, outside puberulent, inside glabrous, apex obtuse to acute. Petals yellowish, oblong-ovate to ovate-lanceolate, 2–3.5 × 1–1.5 cm, outside puberulent or glabrous, inside glabrous; inner petals slightly longer than outer petals. Stamens cuneate; connectives apically obtuse. Carpels many, oblong, densely pubescent; ovule 1 per carpel, basal; stigmas capitate. Fruiting pedicel 3.5–4 cm; monocarp stipes 2.5–5 cm; monocarps red, ovoid-ellipsoid, 2.5–5 × 1–2 cm, glabrous, apex obtuse. Seed 1 per monocarp. Fl. Apr–Jul, fr. Oct–Dec.

Evergreen broad-leaved forests on slopes; 300–700 m. Hainan [Vietnam].

The wood of Polyalthia laui is used for making household implements and as structural timber.


暗罗 an luo

Uvaria suberosa Roxburgh, Pl. Coromandel 1: 31. 1795; Guatteria suberosa (Roxburgh) Dunal.

Shrubs or small trees, to 5 m tall. Bark corky, ridged. Branchlets dark red, rust-colored pubescent when young, glabrescent, with pink lenticels and corky ridges when older. Petiole 2–4 mm, puberulent; leaf blade oblong, elliptic-oblong, or narrowly obovate-oblong, 5–11 × 2–4 cm, membranous to papery, abaxially pale brown when dry and glabrescent, adaxially gray and glabrous except for sparse pubescence along midvein, secondary veins 8–10 on each side of midvein, spreading, and inconspicuous on both surfaces, reticulate veins lax and inconspicuous, base narrowed and slightly oblique, apex subobtuse to rounded and sometimes abruptly short acuminate. Inflorescences extra-axillary, leaf-opposed, or slightly below leaf, 1(or 2)-flowered. Pedicel 0.7–2.5 cm, puberulent; bracteole near base of pedicel, minute, apex acute. Sepals ovate-triangular, 2–2.5 mm, outside pubescent, inside glabrous. Petals yellowish green; outer petals oblong-lanceolate, shorter than inner petals, leathery, flat and spreading, outside slightly pubescent, inside glabrous, apex acute; inner petals oblong, erect and curved, ca. 10 mm, apex obtuse. Stamens many, ca. 1 mm; connectives apically convex. Carpels many, ca. 2 mm, pubescent; ovules 1 or 2 per carpel; styles widening into a thickly triangular bladelike glabrous stigma. Monocarp stipes 8–10 mm, slender; monocarps to 18, red, almost spherical, ca. 5 mm in diam., sparsely appressed pubescent or glabrescent. Seeds 1 or 2 per monocarp, with a longitudinal circumferential band. Fl. almost year-round, fr. Jun–Dec. 2n = 18.

Open forests at lower elevations. S Guangdong, S Guangxi, Hainan [India, Laos, Malaysia, Myanmar, Philippines, Sri Lanka, Thailand, Vietnam].


长叶暗罗 chang ye an luo

Uvaria longifolia Sonnerat, Voy. Indes Orient. 2: 260. 1782; Guatteria longifolia (Sonnerat) Wallich; Unona longifolia (Sonnerat) Dunal.

Trees to 20 m tall; trunk straight. Branches finely striate, minutely puberulent when young, soon glabrous. Petiole 5–10 mm; leaf blade ovate-oblong to ovate-lanceolate, 11–31 × 2.5–8 cm, stiffly membranous to thinly leathery, glabrous, abaxially pale, adaxially dark glossy green, secondary veins 18–24 on each side of midvein, reticulate veins raised on both surfaces, base cuneate, obtuse, or rounded, margin undulate, apex acuminate. Inflorescences axillary, fasciculate and shortly pedunculate, racemose, or umbelliform and sessile, mostly many flowered; peduncle to 0.7–1.5 cm; rachis to 1 cm. Pedicel 2–4 cm; bracteole usually 1, at middle of petiole, to 1 mm, tomentulose. Sepals ovate-triangular, 1.5–3 × 1.5–1.8 mm, outside tomentulose, inside glabrous. Petals greenish yellow, narrowly triangular-lanceolate, 1.3–1.5 × 0.2–0.4 cm, subequal, spreading, inside puberulent except basally, base broad, apex acute. Stamens 8–10 cm; connectives apically convex. Carpels 20–25, ca. 1.5 mm, apex tomentulose; ovule 1 per carpel; stigmas sessile, rectangular to oblong, pubescent, with a groove on inner side and continuing down inner side of ovary. Monocarp stipes 1–2 cm; monocarps 4–8, purple, ovoid, 2–2.5 × ca. 1.5 cm, glabrous. Seed pale brown, ovoid, ca. 2 × 1.4 cm, usually with a longitudinal groove. Fl. May–Jun, fr. Jul–Sep. 2n = 18.

Cultivated; 300–400 m. Hainan, Taiwan, Yunnan [native to India and Sri Lanka].

Polyalthia longifolia is grown for its wood and as an ornamental throughout SE Asia.


沙煲暗罗 sha bao an luo

Polyalthia consanguinea Merrill.

Trees to 12 m tall. Bark dark gray. Branchlets reddish, minutely rust-colored pubescent, soon glabrous, with many lenticels when young. Petiole 3–5 mm, swollen, puberulent; leaf blade oblong-lanceolate to oblanceolate, 10–20 × 2.5–7 cm, thinly leathery to papery, abaxially dull, drying silvery green, and pubescent along midvein, adaxially glabrous and shiny, secondary veins 10–14 on each side of midvein, curving, forming a wide angle with midvein, anastomosing doubly, and adaxially flat, base narrowed and sometimes inequilateral, margin slightly revolute, apex bluntly acuminate. Inflorescences axillary, sometimes formed after leaf fall, 1–3-flowered. Pedicel 1–1.8 cm, pubescent; bracteoles 2 or 3, minute, 2 basal and other medial on pedicel. Sepals ovate-triangular, 2–3 mm, outside pubescent, inside glabrous, apex slightly obtuse. Petals white, oblong, 10–13 × 3–4.5 mm, subequal, outside pubescent, inside glabrous and rough, margins revolute, apex slightly obtuse. Stamens ca. 1 mm; connectives apically flat-topped to
convex, pubescent. Carpels ovate-oblong, ca. 1.5 mm, pubescent; ovules 2 per carpel; stigmas ovoid, pubescent. Monocarp stipes 0.7–2 cm; monocarp reddish brown, globose, 1–2 cm in diam., thinly walled, glabrous, densely minutely verrucate. Seeds 2 per monocarp, verrucose. Fl. Jan–Apr, fr. Jun–Dec.

Woodlands at middle elevations. Hainan [Malaysia].

剑叶暗罗 jian ye an luo

Trees. Bark gray. Branchlets puberulent, glabrescent. Petiole 2–3 mm, pubescent; leaf blade oblong-lanceolate to oblanceolate, 13.5–24 × 4–5 cm, papery, abaxially pubescent along midvein, adaxially glabrous, secondary veins 10–13 on each side of midvein, adaxially flat, base broadly cuneate, apex acuminate to shortly acuminate. Inflorescences axillary, 1– or 2-flowered; peduncle short. Pedicel 5–10 mm, pubescent, bracteolate at base. Sepals broadly ovate, ca. 2 × 3 mm, outside puberulent, inside glabrous. Petals oblong, 6–10 × 2.5–4 mm, all similar and almost equal in length, leathery, outside pubescent, inside glabrous, apex obtuse. Stamens ovate-cuneate; connectives apically broadly truncate, puberulent. Carpels many, ovate-oblong, villous; ovules 2 per carpel, sutural; stigmas sessile, capitulate, villous. Fruit not seen. Fl. Apr–May, fr. Jun–Aug.

- Forested slopes; ca. 200 m. SE Yunnan (Hekou).

Polyalthia lancilimba is listed as Critically Endangered (CR B1ab(i,ii,v)) by the IUCN Red List of Threatened Species (Version 2010.3; http://www.iucnredlist.org; accessed on 7 Oct 2010).

香花暗罗 xiang hua an luo

Guatteria rumphii Blume ex Henschel, Vita Rumphii, 153. 1833; G. jenkinsii J. D. Hooker & Thomson; Polyalthia jenkinsii (J. D. Hooker & Thomson) J. D. Hooker & Thomson.

Trees to 15 m tall. Branches dark brown, longitudinally reticulately striate when dried, glabrous. Petiole dark; leaf blade oblong-elliptic, 14–17 × 7–9 cm, thinly leathery, glabrous, mid-vein axially raised and adaxially flat, secondary veins 8 or 9, at ca. 45° to midrib, and then arcuately ascending, reticulate veins elevated on both surfaces, base rounded, apex acuminate. Inflorescences axillary, 1–6-flowered; peduncle 1–1.5 cm. Pedicel 2–3 cm, glabrous or sparsely shortly hairy. Sepals rounded-triangular, 3–5 mm. Petals green to yellowish green, narrowly lanceolate, 6–7 cm, subequal. Fruiting peduncle ca. 2 × 0.5 cm; pedicel 2.5–3 cm; monocarps black when mature, ellipsoid, 1.7–2.5 × 1.5–2 cm, longitudinally 2-grooved. Fl. Aug. 2n = 18.

Thickets on coral limestone at low elevations. Taiwan (Lan Yu) [Japan (Ryukyu Islands)].

琉球暗罗 liu qiu an luo

Trees to 12 m tall. Branches dark brown, longitudinally reticulately striate when dried, glabrous. Petiole dark; leaf blade oblong-elliptic, 14–17 × 7–9 cm, thinly leathery, glabrous, mid-vein axially raised and adaxially flat, secondary veins 8 or 9, at ca. 45° to midrib, and then arcuately ascending, reticulate veins elevated on both surfaces, base rounded, apex acuminate. Inflorescences axillary, 1–6-flowered; peduncle 1–1.5 cm. Pedicel 2–3 cm, glabrous or sparsely shortly hairy. Sepals rounded-triangular, 3–5 mm. Petals green to yellowish green, narrowly lanceolate, 6–7 cm, subequal. Fruiting peduncle ca. 2 × 0.5 cm; pedicel 2.5–3 cm; monocarps black when mature, ellipsoid, 1.7–2.5 × 1.5–2 cm, longitudinally 2-grooved. Fl. Aug. 2n = 18.

Thickets on coral limestone at low elevations. Taiwan (Lan Yu) [Japan (Ryukyu Islands)].