

**42. CYNOGLOSSUM** Linnaeus, Sp. Pl. 1: 134. 1753.

琉璃草属 liu li cao shu

Herbs perennial or biennial, rarely annual. Leaves usually basal and stem, entire; basal and lower stem leaves usually long petiolate. Cymes terminal or axillary, crowded or often dichotomously branched spreading panicles, bracteate or ebracteate. Flowers pedicellate. Calyx 5-parted to base, enlarged in fruit; lobes reflexed or spreading. Corolla usually blue, rarely white, dark purplish red, blackish purple or yellow-green, campanulate, tubular or funnellform, 5-parted; tube ± shorter than calyx; throat appendages 5, ± square, trapeziform or lunate, depressed at apex; lobes ovate to orbicular. Stamens included, inserted at middle or above in corolla tube; anthers ovoid or oblong. Style filiform, terete or somewhat tetragonous; stigma capitate, not exerted; ovary 4-parted; ovule anatropous. Gynobase fastigiate to conical. Nutlets 4, ovoid to subglobose, with glochids, attachment scar subapical.

About 75 species: cosmopolitan, primarily in Africa, Asia, and Europe, 12 species in China.

- 1a. Plants 8–15 cm tall, caespitose, high alpine plants; basal leaf blades 2–4 cm × 5–10 mm ..... 12. *C. schlagintweitii*
- 1b. Plants more than 15 cm tall, rarely caespitose; basal leaf blades larger.
  - 2a. Nutlets ca. 5 mm in diam. or larger.
    - 3a. Inflorescences with linear-lanceolate bracts.
      - 4a. Fruiting pedicel 2–4 cm; abaxial surface of nutlets flat, without keel; calyx lobes ovate to ovate-lanceolate ..... 1. *C. divaricatum*
      - 4b. Fruiting pedicel to 1 cm; abaxial surface of nutlets concave, keeled along center line; calyx lobes linear to linear-lanceolate ..... 5. *C. gansuense*
    - 3b. Inflorescences ebracteate.
      - 5a. Basal and lower stem leaves cordate to cordate-orbicular; nutlets to 15 mm in diam. .... 3. *C. triste*
      - 5b. Basal and lower stem leaves oblong; nutlets 5–8 mm in diam.
        - 6a. Leaf blade 7–9 cm wide; corolla greenish yellow; lobes of fruiting calyx 2.5–4 mm ..... 4. *C. viridiflorum*
        - 6b. Leaf blade 1–5 cm wide; corolla blue-purple; lobes of fruiting calyx ca. 10–15 mm ..... 2. *C. macrocalycinum*
  - 2b. Nutlets 2–5 mm in diam.
    - 7a. Nutlets 4–5 mm in diam.; leaves gray-green, densely pubescent; inflorescences numerous, paniculate; limb of corolla 8–10 mm wide ..... 7. *C. amabile*
    - 7b. Nutlets 2–3.5 mm in diam.; leaves green to grayish green; inflorescences not crowded; limb of corolla 2.5–7 mm wide.
      - 8a. Inflorescences not branched ..... 6. *C. wallichii*
      - 8b. Inflorescences branched.
        - 9a. Corolla 1.5–2.5 mm.
          - 10a. Pedicel 1–1.5 mm; plants perennial ..... 11. *C. lanceolatum*
          - 10b. Pedicel 3–5 mm; plants annual or biennial ..... 10. *C. formosanum*
        - 9b. Corolla 3.5–5 mm.
          - 11a. Plants long villous ..... 9. *C. alpestre*
          - 11b. Plants densely strigose ..... 8. *C. furcatum*

**1. *Cynoglossum divaricatum*** Stephan ex Lehmann, Pl. Asperif. Nucif. 161. 1818.

大果琉璃草 da guo liu li cao

Herbs perennial, 25–100 cm tall. Roots red-brown, straight, stout. Stems erect, hollow, ribbed, branched above, appressed pilose; branches spreading. Basal and lower stem leaves gray-green, oblong-lanceolate to lanceolate, 7–15 × 2–4 cm, densely appressed pubescent, base attenuate, apex obtuse to acuminate; middle and upper stem leaves sessile, narrowly lanceolate, gray pubescent. Inflorescences paniculate, terminal or axillary, ca. 10 cm; bracts narrowly lanceolate to linear. Pedicel slender, 3–10 mm, to 2–4 cm in fruit, recurved, densely appressed pilose. Flowers widely spaced. Calyx 2–3 mm, pubescent outside; lobes reflexed, ovate to ovate-lanceolate, scarcely enlarged in fruit. Corolla blue-purple, ca. 3 mm, parted to lower 1/3; throat appendages trapeziform, ca. 0.5 mm; limb 3–5 mm wide; lobes ovate-orbicular, apex retuse. Stamens inserted above middle of

corolla tube; anthers ovoid, ca. 0.6 mm. Nutlets ovoid, 4.5–6 × ca. 5 mm, with dense glochids, adaxially flat; attachment scar orbicular, above middle.

Dry slopes, dunes, rocky marshes, roadsides, meadows; 500–2500 m. Gansu, Hebei, Heilongjiang, Jilin, Liaoning, Nei Mongol, Ningxia, Shaanxi, Shandong, Shanxi, Xinjiang [Kazakhstan, Mongolia, Russia].

The roots are used medicinally.

**2. *Cynoglossum macrocalycinum*** Riedl, Novon 4: 46. 1994.

大萼琉璃草 da e liu li cao

Herbs biennial, stout, at least 50–60 cm tall. Stems with few branches in leaf axils, with patent or slightly reflexed white hairs. Lowermost leaves indistinctly petiolate; upper middle leaves sessile, oblong-lanceolate, 13–14 × 3–3.5 cm, base attenuate, apex ± acute; uppermost leaf blade ovate to oblong-lanceolate, 5.5–11 × 2–3 cm, base often abruptly contracted or rounded, apex acute to ± obtuse; leaves of

lateral branches lanceolate to linear-lanceolate, (3–)6–9 × 0.8–1.8 cm; leaf indumentum of ± patent, curved hairs of different lengths. Cymes short, widely spaced at apex, ebracteate. Pedicel ca. 1 cm at anthesis, to 3 cm in fruit, densely white pubescent, straight at first, slightly recurved later along upper 1/3. Calyx 8–9 mm at anthesis; lobes free to base, imbricately covering each other along margin, ovate to ovate-oblong, elongated to 1–1.5 cm after anthesis, unequal in length and width, widest to 5 mm, narrowest ca. 2.5 mm, often also shorter than others, all subexplanate, densely white patent pubescent, apex broadly obtuse. Corolla dark purple, campanulate, exceeding calyx, 9–9.5 mm wide, with reticulate veins; tube ca. 5 mm, ca. as long as limb; faucal appendages large, subquadrate, larger than anthers; lobes to 2 mm, very broadly rounded. Style short, included in corolla; ovary not enlarged after anthesis. Mature nutlets unknown.

• Shaded moist slopes, valleys, meadows; 1500–1800 m. N Xinjiang.

The plants are used medicinally.

**3. *Cynoglossum triste*** Diels, Notes Roy. Bot. Gard. Edinburgh 5: 169. 1912.

心叶琉璃草 xin ye liu li cao

Herbs perennial, 15–50 cm tall. Stems several and caespitose or single, erect, stout, hispid. Basal and lower stem leaves long petiolate, cordate to ovate-orbicular, 5–12 × 3.5–8 cm, base entire to repand, apex acute, cordate to rounded, slightly appressed hispid, hairs discoid at base; upper stem leaves short petiolate, cordate to oblong-ovate, 6–9 × 3–6 cm; lateral veins 3 or 4 pairs. Inflorescences 3–6, becoming terminally clustered, ebracteate. Pedicel 2–2.5 mm, elongated after anthesis. Calyx 5–6 mm; lobes lanceolate to lanceolate-oblong, 1.5–2 mm wide, enlarged after anthesis, hirsute. Corolla black-purple, tubular, 5–6 mm, base ca. 3 mm wide; throat appendages trapeziform, 1.5–2 × ca. 1 mm; limb 8–10 mm wide; lobes subovate, obtuse-mucronate at apex. Anthers oblong, ca. as long as appendages. Style terete, 2–2.5 mm. Nutlets depressed, to 1.5 cm in diam., abaxially convex; glochids dense, yellow, ca. 2 mm. Fl. May-Jul.

• Shaded moist slopes, *Pinus* forests; 2500–3100 m. SW Sichuan, NW Yunnan.

**4. *Cynoglossum viridiflorum*** Pallas ex Lehmann, Pl. Asperif. Nucif. 1: 160. 1818.

绿花琉璃草 lu hua liu li cao

Herbs perennial, 50–100 cm tall. Stems stout, ribbed, glabrous. Basal and lower stem leaves oblong-elliptic, 15–25 × 7–9 cm, abaxially gray-green, densely pubescent, adaxially green and glabrous, base attenuate, apex acuminate; middle and upper stem leaves short petiolate or sessile, oblong to lanceolate, 10–15 × 3–5 cm. Inflorescences terminal or axillary, paniculate, ebracteate. Pedicel 1.5–3 mm, to 1 cm after anthesis, recurved, densely white pilose. Calyx 2.5–4 mm, appressed pubescent outside; lobes oblong-linear. Corolla greenish yellow, 4.5–5.5 mm, base 1–1.5 mm wide; throat appendages trapeziform, ca. 1.5 × 1 mm; limb 5–6 mm wide; lobes orbicular. Stamens inserted on middle of corolla tube; anthers oblong, ca. as long as appendages. Style ca. 1.5

mm. Nutlets ovoid to rhombic-ovoid, 5–7 × 4.5–5.5 mm; prickles dense, anchorlike, abaxially concave, obscurely keeled or without keels along center line; attachment scar above middle adaxially, ovate-oblong. Fl. May-Jun, fr. Jul-Aug.

Stream banks, thicket margins, rocky crevices; 700–1700 m. N Xinjiang [Kazakhstan, Kyrgyzstan, Russia, Tajikistan, Turkmenistan, Uzbekistan].

**5. *Cynoglossum gansuense*** Y. L. Liu, Acta Phytotax. Sin. 19: 519. 1981.

甘青琉璃草 gan qing liu li cao

Herbs perennial, 30–60 cm. Stems erect, woody at base, branched above, appressed or spreading hispid, hairs discoid at base. Lower stem leaves linear-lanceolate, 9–16 × 1–1.5 cm, abaxially densely white pilose, adaxially densely short appressed hirsute, hairs discoid at base, base attenuate, margin entire to repand, apex acuminate. Inflorescences terminal and lateral, becoming more contracted paniculate, with lanceolate bracts. Pedicel 1–1.5 mm, to 1 cm in fruit. Calyx 4–5 mm; lobes spreading, linear to linear-lanceolate, to 1.3 cm in fruit, strigose and hispid outside, hairs discoid at base, pilose inside. Corolla blue, base 3–5 mm wide; throat appendages trapeziform, ca. 0.5 mm; limb 3–6 mm wide; lobes orbicular. Stamens inserted at middle of corolla tube; filaments ca. 0.7 mm; anthers oblong, ca. 1 mm. Style ca. 1.5 × 0.5 mm. Nutlets ovoid to long ovoid, 5–6.5 mm, with dense glochids; abaxially slightly concave, ± keeled along center line; attachment scar at apex adaxially, rhomboid-ovate. Fl. Jul.

• Hillside meadows, in tussocks at forest margins, fields, roadsides; 1600–2900 m. C and SE Gansu, E Qinghai, S Ningxia, N Sichuan.

**6. *Cynoglossum wallichii*** G. Don, Gen. Hist. 4: 354. 1837.

西南琉璃草 xi nan lu li cao

Herbs biennial, 20–60(–70) cm tall. Stems single or several and caespitose, branched above, densely hispid, hairs discoid at base; branches slender, spreading. Basal and lower stem leaves petiolate, green to gray-green, lanceolate to obovate, 2–5 cm × 5–12 mm; middle and upper stem leaves ± sessile, green to gray-green, smaller, sparsely hispid and appressed pubescent. Inflorescences terminal and axillary, forked, to 20 cm in fruit, becoming racemelike, many flowered at anthesis, ebracteate. Pedicel ca. 5 mm in fruit, recurved. Calyx 2–2.5 mm, densely and antrorsely appressed pilose; lobes erect, ovate to oblong, ca. 2 × 0.5 mm, slightly enlarged in fruit, margin ciliate. Corolla blue or blue-purple, campanulate, base 3–4 mm wide; throat appendages trapeziform, ca. 0.7 mm, margin pubescent; limb 2.5–4.5 mm wide; lobes orbicular; veins distinctly reticulate. Anthers oblong, 0.8–1 mm. Nutlets ovoid, 3–4 × 2.5–3 mm; abaxially concave, with glochids, base of marginal glochids expanded and confluent forming a wing, apex of nutlets rounded to acute. Fl. and fr. May-Aug.  $2n = 24$ .

Hillside meadows, forests, forest margins, slopes, roadsides; 1300–3600 m. Gansu, Qinghai, Sichuan, Xizang, Yunnan [Afghanistan, Bhutan, India, Kashmir, Myanmar, Nepal, Pakistan].

- 1a. Abaxial surface of nutlets with sparse to dense glochids; marginal glochids numerous, expanded and confluent into a broad wing ..... 6a. var. *wallichii*
- 1b. Abaxial surface of nutlets with glochids only along center line keel; marginal glochids slightly expanded and confluent into a narrow wing ..... 6b. var. *glochidiatum*

**6a. *Cynoglossum wallichii* var. *wallichii***

西南琉璃草 (原变种) xi nan liu li cao (yuan bian zhong)

*Cynoglossum denticulatum* A. de Candolle; *C. edgeworthii* A. de Candolle.

Abaxial surface of nutlets with sparse to dense glochids, marginal glochids numerous, expanded and confluent into a broad wing.

Hillside meadows, moist shaded forests; 1300–3600 m. S Gansu, W Sichuan, SE Xizang, NW Yunnan [Afghanistan, Bhutan, India, Nepal, Pakistan].

**6b. *Cynoglossum wallichii* var. *glochidiatum*** (Wallich ex Benth) Kazmi, *J. Arnold Arbor.* 52: 347. 1971.

倒钩西南琉璃草 dao gou xi nan liu li cao

*Cynoglossum glochidiatum* Wallich ex Benth in Royle, *Ill. Bot. Himal. Mts.* 1: 306. 1839.

Abaxial surface of nutlets with glochids only along center line keel, marginal glochids slightly expanded and confluent into a narrow wing.  $2n = 24$ .

Forest margins, slopes, roadsides. S Gansu, Qinghai, N and SW Sichuan, S Xizang, SW Yunnan [Afghanistan, Bhutan, India, Kashmir, Myanmar, Nepal, Pakistan].

**7. *Cynoglossum amabile*** Stapf & J. R. Drummond, *Bull. Misc. Inform. Kew* 1906: 202. 1906.

倒提壶 dao ti hu

Herbs perennial 15–60 cm tall. Stems single or several and cespitose, densely spreading pubescent. Basal leaves long petiolate, gray-green, oblong-lanceolate to lanceolate, 5–20 cm, densely pubescent; stem leaves sessile, gray-green, oblong to lanceolate, 2–7 cm; lateral veins conspicuous. Inflorescences paniculate, ebracteate. Pedicel 2–3 mm, slightly elongated in fruit. Calyx 2.5–3.5 mm, densely pilose outside; lobes ovate to oblong, apex acute. Corolla usually blue, rarely white, base 5–6 mm wide; throat appendages trapeziform, ca. 1 mm; limb 8–10 mm wide; lobes orbicular, ca. 2.5 mm; veins distinctly reticulate. Anthers oblong, ca. 1 mm. Style linear-terete. Nutlets ovoid, 3–4 mm; adaxially slightly concave, with dense glochids; base of marginal glochids confluent, ± forming a wing; attachment scar above middle abaxially, triangular. Fl. and fr. May–Sep.  $2n = 24$ .

Hillside meadows, forests, thickets, roadsides, river banks; 2600–3700 m. Gansu, Guizhou, Sichuan, Xizang, Yunnan [Bhutan].

- 1a. Nutlets slightly concave abaxially, with dense glochids ..... 7a. var. *amabile*
- 1b. Nutlets keeled along center line

abaxially, with glochids usually only on keel ..... 7b. var. *pauciglochidiatum*

**7a. *Cynoglossum amabile* var. *amabile***

倒提壶 (原变种) dao ti hu (yuan bian zhong)

Nutlets slightly concave abaxially, with dense glochids.

Hillside meadows, roadsides, thickets, coniferous forests; 2600–3700 m. S Gansu, W Guizhou, W Sichuan, SE and SW Xizang, Yunnan [Bhutan].

**7b. *Cynoglossum amabile* var. *pauciglochidiatum*** Y. L. Liu, *Acta Phytotax. Sin.* 19: 520. 1981.

滇西倒提壶 dian xi dao ti hu

Nutlets keeled abaxially along center line, with glochids usually only on keel.

• Hillside meadows, river banks, forests; 2600–3700 m. N and SW Sichuan, NW Yunnan.

**8. *Cynoglossum furcatum*** Wallich in Roxburgh, *Fl. Ind.* 2: 6. 1824.

琉璃草 liu li cao

Herbs erect, 40–60 cm tall. Stems single or several and cespitose, densely yellowish brown strigose. Basal and lower stem leaves long petiolate, oblong-lanceolate, 15–20 × 3–5 cm, densely appressed pubescent, base attenuate, apex obtuse; upper stem leaves sessile, smaller. Inflorescences terminal and axillary, subdichotomously branching; branches spreading at obtuse angle, ebracteate. Pedicel 1–2 mm, shorter than calyx in fruit, densely strigose. Calyx 1.5–2 mm, slightly enlarged to ca. 3 mm in fruit; lobes ovate-oblong, densely strigose outside. Corolla blue, funnelform, base 3.5–4.5 mm wide; throat appendages trapeziform, ca. 1 mm, margin densely white pilose, apex retuse; limb 5–7 mm wide; lobes oblong, apex rounded. Filaments expanded at base; anthers oblong, ca. 1 × 0.5 mm. Style somewhat tetragonous, ca. 1–2.5 mm. Nutlets ovoid-globose, 2–3 × 1.5–2.5 mm, abaxially concave, with dense glochids, margin wingless or winged below middle. Fl. and fr. May–Oct.  $2n = 24$ .

Forest meadows, sunny slopes; 300–3000 m. Fujian, S Gansu, Guangdong, Guangxi, Guizhou, Hainan, Henan, Hunan, Jiangsu, Jiangxi, Shaanxi, Sichuan, Taiwan, Yunnan, Zhejiang [Afghanistan, India, Japan, Malaysia, Pakistan, Philippines, Thailand, Vietnam].

- 1a. Inflorescences much branched, with short branches; leaf blades often with long soft hairs; glochids on abaxial surface of nutlets numerous ..... 8a. var. *furcatum*
- 1b. Inflorescences less branched, with elongated branches; leaf blades short pubescent; glochids on abaxial surface of nutlets less abundant ..... 8b. var. *villosulum*

**8a. *Cynoglossum furcatum* var. *furcatum***

琉璃草 (原变种) liu li cao (yuan bian zhong)

Leaves small, with long soft hairs. Inflorescences

branched; branches short. Glochids on abaxial surface of nutlets numerous.

Forest meadows, sunny slopes; 300–3000 m. Fujian, S Gansu, Guangdong, Guangxi, Guizhou, Hainan, Henan, Hunan, Jiangsu, Jiangxi, Shaanxi, Sichuan, Taiwan, Yunnan, Zhejiang [Afghanistan, India, Japan, Malaysia, Pakistan, Philippines, Thailand, Vietnam].

The roots are used medicinally.

**8b. *Cynoglossum furcatum* var. *villosulum*** (Nakai) Riedl, *Novon* 4: 46. 1994.

短毛琉璃草 duan mao liu li cao

*Cynoglossum villosulum* Nakai, *Bot. Mag. (Tokyo)* 37: 6. 1923.

Leaves larger, short pubescent. Inflorescences less branched; branches elongate. Glochids on abaxial surface of nutlets fewer.

China [Japan].

**9. *Cynoglossum alpestre*** Ohwi, *Acta Phytotax. Geobot.* 2: 150. 1933.

高山倒提壺 gao shan dao ti hu

Herbs perennial, long villous. Stems to 50 cm tall, few branched above. Basal leaves linear-lanceolate or oblanceolate, base attenuate, margin entire, apex acute; stem leaves sessile, linear-lanceolate. Racemes erect, elongated to 11 cm, often 2-branched at base, ebracteate. Pedicel short. Calyx lobes ovate, 2–3 mm, ca. 5 mm in fruit, pubescent outside. Corolla blue, ca. 5 mm across; tube 3–4 mm; lobes spreading, ca. 2 mm, rounded; scales reniform, emarginate at apex. Filaments short. Nutlets 4, compressed, ovate, ca. 3 mm wide, with long glochids.

• Alpine areas; 1200–2500 m. Taiwan.

**10. *Cynoglossum formosanum*** Nakai, *Bot. Mag. (Tokyo)* 37: 4. 1923.

台湾琉璃草 tai wan liu li cao

Herbs annual or biennial. Petiole of basal leaves ca. 3.5 cm; leaf blade lanceolate, ca. 10 cm, abaxially equally setulose, adaxially densely setulose, apex cartilaginous; veins elevated; stem leaves lanceolate, abaxially soft pubescent. Inflorescences branched, 3–10 cm in fruit. Pedicel 3–5 mm, pilose. Calyx 5-parted; lobes oblong, ca. 1.5 mm, to 2–3 mm in fruit, setulose, inside glabrous. Corolla pale blue, campanulate, 5-lobed. Style persistent. Nutlets homogenous, dark brown, with glochids.

Taiwan [Japan].

**11. *Cynoglossum lanceolatum*** Forsskål, *Fl. Aegypt.-Arab.* 41. 1775.

小花琉璃草 xiao hua liu li cao

*Cynoglossum canescens* Willdenow; *C. hirsutum* Thunberg; *C. micranthum* Poirlet; *C. racemosum* Roxburgh.

Herbs perennial, 20–90 cm tall. Stems erect, branched from middle or below, densely hispid, hairs discoid at base;

branches spreading. Basal and lower stem leaves petiolate, oblong-lanceolate, 8–14 × ca. 3 cm, abaxially densely pubescent, adaxially hispid and densely appressed pubescent, hairs discoid at base, base attenuate, apex acute; upper stem leaves sessile or short petiolate, lanceolate, smaller. Inflorescences terminal and axillary; branches spreading at an obtuse angle, ebracteate. Pedicel 1–1.5 mm, scarcely elongated in fruit. Calyx 1–1.5 mm; lobes ovate, densely short appressed pubescent outside, glabrous inside, slightly enlarged in fruit, apex obtuse. Corolla light blue, campanulate, 1.5–2.5 mm; throat appendages lunate; limb 2–2.5 mm wide. Anthers ovoid, ca. 0.5 mm. Style tetragonous, ca. 1 mm. Nutlets ovoid-globose, 2–2.5 mm, abaxially concave, with dense glochids, marginal glochids not confluent at base. Fl. and fr. Apr–Sep.  $2n = 24$ .

Hills, meadows, roadsides; 300–2800 m. Fujian, S Gansu, Guangdong, Guangxi, Guizhou, Hainan, Henan, Hunan, Jiangsu, Jiangxi, Shaanxi, Sichuan, Taiwan, Yunnan, Zhejiang [Cambodia, N India, Kashmir, Laos, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka, N Thailand; Africa, SW and W Asia].

Used medicinally.

**12. *Cynoglossum schlagintweitii*** (Brand) Kazmi, *J. Arnold Arbor.* 52: 352. 1971.

西藏琉璃草 xi zang liu li cao

*Adelocaryum schlagintweitii* Brand, *Repert. Spec. Nov. Regni Veg.* 13: 548. 1915.

Herbs suffrutescent, 8–15 cm tall. Stems several, cespitose, erect or ascending, upwardly pilose. Basal leaves long petiolate, oblanceolate to obovate, 2–4 cm × 5–10 mm, abaxially densely appressed pubescent, adaxially sparsely hispid, hairs discoid at base, base attenuate, apex obtuse; stem leaves short petiolate or sessile, 0.6–1.5 cm. Inflorescences solitary, rarely branched, terminal, 6–10 mm. Pedicel 1–1.5 mm, to 3 mm after anthesis, recurved. Flowers widely spaced. Calyx 1–1.5 mm, densely hispid, short appressed pubescent outside, glabrous inside; lobes oblong, apex obtuse. Corolla blue or blue-purple, campanulate, base 2–4 mm wide; throat appendages lunate; limb 3–5 mm wide; lobes divaricate, broadly ovate. Anthers oblong, 0.5–0.7 mm. Nutlets ovoid, 3–4 mm; abaxially flat, with scattered glochids; base of marginal glochids expanded and confluent into a broad wing. Fl. Jun, fr. Jul–Aug.

Gravelly slopes, forests; 2500–4000 m. SW Xizang [India].

According to Robert R. Mill (in litt.), *Paracaryum trinervum* Duthie (*Bull. Misc. Inform. Kew* 1912: 39. 1912) and *Cynoglossum schlagintweitii*, both described from Xizang, are probably conspecific. If so, the epithet *trinervum* needs to be transferred to *Cynoglossum*.

