Saint-Pétersbourg 4: 315. 1845.

Shrublets. Stems conspicuous. Stipules 2, opposite petiole, scarious, connate or free, deciduous. Leaves imparipinnate; leaflet blades opposite, margin entire. Racemes axillary, lax, many flowered; bracts marcescent or caducous. Bracteoles 2 at base of calyx. Calyx campanulate or obliquely campanulate; teeth 5, unequal or subequal. Corolla purple or pinkish purple, marcescent on mature legumes; standard longer than wings, slightly longer than keel, not turned backward at anthesis; keel with claw longer than half of lamina. Stamens diadelphous (9+1). Ovary sessile, hairy. Legume articulate, divided into several loments, indehiscent, adaxial suture grooved; loments compressed or biconvex, lanate, pubescent, or glabrous, with or without prickles.

Five species: China, Kazakhstan, Mongolia, Russia; five species (one endemic) in China.

1a. Leaves at apex without leaflet to only 1 at terminating rachis; legume densely lanate
1b. Leaves normally imparipinnate; legume glabrous to pubescent.

2a. Calyx tube split between adaxial or lateral teeth; leaflet blades 15–31, broadly ovate to suborbicular.
2b. Calyx tube not split between teeth; leaflet blades (5–)11–19(–21), oblong, elliptic, broadly linear, or lanceolate.

3a. Calyx obliquely campanulate, tube split between adaxial teeth
3b. Calyx 2-labiate, tube split between adaxial and lateral teeth

4a. Legume pubescent and prickly
4b. Legume glabrous


细枝山竹子 xi zhi shan zhu zi


Shrublets. Stems pale yellow to brown, erect, with fibrous stripping. Stipules ovate-lanceolate, 5–6 mm, basally connate. Leaves 10–25 cm, basal ones 7–11-foliolate, apical ones 3–5-foliolate or sometimes none; leaflet blades linear-oblong to narrowly lanceolate, 1.5–3 × 0.3–0.6 cm, abaxially pilose, adaxially pubescent to glabrous. Racemes lax, with many flowers; bracts ovate, 1–1.5 mm; peduncle longer than leaves. Pedicel 2–3 mm. Calyx campanulate, 5–6 mm, pubescent; teeth triangular, unequal, abaxial 3 longer than adaxial 2. Corolla purple; standard obovate-orbicular, 1.5–1.9 cm; wings ca. 1/2 as long as standard; keel slightly shorter than standard. Ovary pubescent. Legume divided into 2–4 loments; loments broadly ovoid, 5–6 × 3–4 mm, inflated, densely white lanate. Fl. Jun–Sep, fr. Aug–Oct. 2n = 16*.

Sandy areas in deserts and semideserts; 600–1100 m. Gansu, Hebei, W Henan, W Hubei, W Nei Mongol, Ningxia, Qinghai, Shaanxi, Shanxi, NW Sichuan, NE Xizang.


帕米尔山竹子 pa mi er shan zhu zi


Shrublets, 60–100 cm tall. Stems erect, many branched, internodes short. Stipules brown, lanceolate, basally connate. Leaves 9–20 cm, 15–31-foliolate; leaflet blades elliptic to almost orbicular, 3–9 × 3–7 mm, abaxially slightly unevenly sericeous, adaxially glabrous, base subrounded to slightly cuneate, apex obtuse to slightly emarginate. Racemes lax, 6–16-flowered; peduncle ca. 2 × as long as leaves. Pedicel ca. 2 mm. Calyx teeth almost as long as tube. Corolla purple, 1.1–1.8 cm; standard ovobate, apex emarginate; wings narrowly lanceolate,
HEDYSARAE

to almost $2 \times$ as long as keel; keel almost semiorbicular to oblong, shorter than standard. Legume sericeous; loments 1 or 2, 4–7 × 4–6 mm. Fl. Jun–Jul, fr. Jul.

Mountain slopes, roadsides; 2100–3000 m. W Xinjiang (Pamir Shan) [Kyrgyzstan, Tajikistan].


山竹子 shan zhu zi

Shrublets, 30–80 cm tall. Stems caespitose, erect. Stipules ovate-lanceolate, 4–5 mm, basally connate. Leaves 8–14 cm, 11–19-foliolate; leaflet blades elliptic to oblong, 1.4–2.2 × 0.3–0.6 cm, abaxially densely pubescent, adaxially sparsely pubescent. Racemes lax, with many flowers; bracts triangular-ovate, ca. 1 mm; peduncle longer than leaves. Pedicel 2–3 mm. Calyx campanulate, 5–6 mm, pubescent; teeth triangular, ± equal, ca. 1/2 as long as tube. Corolla purple; standard obovate-orbicular, 1.4–2 cm; wings ca. 1/3 as long as standard; keel slightly shorter than standard. Ovary pubescent. Legume divided into 2 or 3 loments; loments ellipsoid, 5–7 × 3–4 mm, inflated, pubescent, prickly or not. Fl. Jul–Aug, fr. Aug–Sep.

Sandy areas in steppes; 600–1100 m. Heilongjiang, Jilin, W Liaoning, NE Nei Mongol [E Mongolia, E Russia].

Plants of this species are cultivated for sand-dune stabilization and for fodder.

1a. Loments prickly ........................................ 4a. var. fruticosum
1b. Loments not prickly ........................... 4b. var. mongolicum

4a. Corethrodendron fruticosum var. fruticosum

山竹子 (原变种) shan zhu zi (yuan bian zhong)

Hedysarum fruticosum Pallas, Reise Russ. Reich. 3: 753. 1776.

Loments pubescent and prickly.

Sandy areas in steppes; ca. 1100 m. Heilongjiang, Jilin, W Liaoning, NE Nei Mongol [E Mongolia, E Russia].


蒙古山竹子 meng gu shan zhu zi


Loments pubescent but not prickly.

● Sandy areas; 600–800 m. W Liaoning, NE Nei Mongol.

Corethrodendron fruticosum var. mongolicum was reported from Ningxia (Fl. Ningxiaensis, ed. 2, 1: 487. 2007), but this occurrence needs to be confirmed.


木山竹子 mu shan zhu zi

Shrublets, 60–100 cm tall. Stems caespitose, erect. Stip-
Sandy areas. W Liaoning, Nei Mongol, E Ningxia, N Shaanxi, NW Shanxi [Mongolia].

1a. Calyx teeth triangular, ca. 1/2 as long as tube; wings ca. 1/3 as long as standard .... 5a. var. lignosum
1b. Calyx teeth shortly triangular, ca. 1/3 as long as tube; wings ca. 1/4 as long as standard ............................. 5b. var. laeve

5a. Corethrodendron lignosum var. lignosum

木山竹子(原变种) mu shan zhu zi (yuan bian zhong)


Calyx teeth triangular, ca. 1/2 as long as tube. Corolla wings ca. 1/3 as long as standard.

5b. Corethrodendron lignosum var. laeve (Maximowicz) L. R. Xu & B. H. Choi, comb. nov.

塔落山竹子 ta luo shan zhu zi


Calyx teeth shortly triangular, ca. 1/3 as long as tube. Corolla wings ca. 1/4 as long as standard.

• Sandy areas. Nei Mongol, E Ningxia, N Shaanxi, NW Shanxi.

Plants of this taxon are effective for dune-fixing.