
秦岭藤属 qin ling teng shu

Lianas or twining herbs. Leaves linear to lanceolate, usually with minute, pale, adaxial dots. Inflorescences extra-axillary, with 1 to few, umbel-like, rarely elongated cymes. Sepals valvate, often with 5 basal glands. Corolla urceolate or campanulate, lobes valvate. Corona inserted at base of gynostegium, ringlike, shallowly 5-cleft or toothed. Filaments connate into a short tube; anther appendages incurved; pollinia 2 per pollinarium, oblong, pendulous. Stigma head discoid. Follicles usually 1, narrowly lanceolate in outline.

About 13 species: all endemic to China.

Biondia is closely related to Cynanchum. It is distinguished by the better-developed corolla tube and reduced, ringlike corona, which in dried material gives the gynostegium an appearance of being stalked. Most collections have narrow leaves adaxially with distinctive minute pale dots. Biondia is not well represented in herbaria, and species delimitation is uncertain.

1a. Corolla interior glabrous.
   2a. Leaf blade 1–1.5 mm wide; corolla ca. 2 mm .......................................................... 8. B. longipes
   2b. Leaf blade 7–15 mm wide; corolla 3–4.5 mm. ............................................................ 3.
   3a. Corolla lobes 1/3–1/2 as long as tube; leaves 3–6 × 0.7–1 cm ..................................................... 1. B. chinensis
   3b. Corolla lobes less than 1/4 as long as tube; leaves 5–9 × 1–1.5 cm. ................................. 4.
      4a. Inflorescences including flowers 1.5–2.5 cm; corolla broadly cylindric, ca. 2 mm wide .......... 2. B. hemsleyana
      4b. Inflorescences including flowers less than 1 cm; corolla urceolate, ca. 1 mm wide at throat, broader below .................................................. 3. B. parviurnula
   1b. Corolla interior hairy.
      5a. Corolla tube clearly shorter than lobes.
         6a. Pedicel 2–5 mm; internodes uniformly minutely puberulent when young, later glabrescent; leaf veins mostly obscure, never pale and reticulate .................................................. 11. B. henryi
         6b. Pedicel 10–15 mm; internodes with distinct lines of hairs; veins of older leaves becoming prominently pale and reticulate.
            7a. Abaxial leaf surface with 2 or 3 main lateral vein pairs at acute angles to midrib plus up to 6 minor lateral veins at ca. 90º to midrib ............................................................... 12. B. insignis
            7b. Abaxial leaf surface with lateral veins 5–7 pairs at ca. 45º to midrib, all similar ........................ 13. B. laxa
      5b. Corolla tube as long as or longer than lobes.
         8a. Corolla tube urceolate, clearly widest below throat.
            9a. Internodes puberulent along 1 side only; petiole 5–10 mm ........................................ 4. B. microcentra
            9b. Internodes uniformly puberulent; petiole 1–2 mm .................................................. 5. B. yunnanensis
         8b. Corolla tube cylindric or campanulate, widest at throat or with parallel sides.
            10a. Leaves to 13 mm wide; inflorescences with an umbel-like cyme; sepals glabrous ................ 6. B. tsiukowensis
            10b. Leaves to 5 mm wide; inflorescences often with 2 cymes separated by a distinct rachis; sepals sparsely puberulent.
               11a. Corolla tube longer than lobes; cymes racemelike with short but distinct rachis .............. 7. B. crassipes
               11b. Corolla tube as long as lobes; cymes umbel-like with rachis completely suppressed.
                  12a. Stems hairy along 1 side only; pedicel 4–6 mm .................................................. 9. B. pilosa
                  12b. Stems minutely hairy along 2 sides; pedicel 7–9 mm ........................................... 10. B. revoluta


秦岭藤 qin ling teng

Lianas to 2 m. Branches terete, slender, minutely pubescent along 2 lines. Leaves remote; petiole 3–5 mm; leaf blade lanceolate to linear-lanceolate, 3–6 cm × 7–10 mm, glabrescent; lateral veins flat, obscure. Cymes umbel-like, few flowered, sometimes 2 close together; peduncle 5–8 mm. Pedicel threadlike, 5–8 mm, minutely puberulent. Sepals ovate-elliptic. Corolla lobes 1/3–1/2 as long as tube, acute, erect, glabrous. Corona ringlike, rim shallowly 5-cleft. Anthers oblong-rhomboid, apex broadly triangular, subacute, infolded; pollinia oblong, caducous as long as pollinia, retinaculum half as long as pollinia. Follicles narrowly lanceolate, 5–7 cm × ca. 4 mm. Seeds linear, ca. 7 × 2 mm; coma ca. 1 cm. Fl. May, fr. Oct.

More material is needed to determine if Biondia chinensis is distinct from B. hemsleyana.


宽叶秦岭藤 kuan ye qin ling teng


Lianas to 2 m. Internodes glabrescent. Petiole 5–7 mm, adaxially pubescent; leaf blade narrowly lanceolate, 5–9 × 1–1.5 cm, short acuminate or acute at both ends, margin subrevolute; midvein pubescent and elevated abaxially, lateral veins obscure. Inflorescences sometimes branched at base to form small groups; cymes umbel-like, up to 7-flowered;
peduncle to 1 cm, sparsely puberulent. Pedicel to 9 mm, sparsely puberulent. Sepals ovate, ca. 1.5 mm, without basal glands. Corolla white, broadly cylindrical, to 4.5 mm; lobes broadly triangular, ca. 0.5 mm. Corona ringlike, rim 5-toothed. Anther apex rounded; pollinia globose. Follicles linear-lanceolate, 5–6 cm × 3–5 mm. Seeds ovate-oblong, ca. 5 × 2 mm; coma ca. 2 cm. Fl. Apr-Sep, fr. Oct-Dec.

- **Mixed woods; 1400–2000 m. Sichuan.**


小花秦岭藤  xiao hua qin ling teng

Herbs twining. Stems densely minutely puberulent along 2 sides. Petiole to 7 mm, adaxially puberulent; leaf blade lanceolate, to 6.5 × 2.2 cm, glabrous except for adaxially densely puberulent midrib, base rounded, apex acute-apiculate; lateral veins 3 or 4 pairs, slightly raised on both sides; upper leaves relatively narrower, ± elliptic to oblong-elliptic, to 5 cm × 1.2 cm, sparsely puberulent. Peduncle 1.5–2 mm, glabrous. Sepals lanceolate, ca. 1.5 × 0.7 mm, apex acute, pubescent, somewhat glabrescent. Corolla urceolate, 3–3.5 mm, pale purple inside, glabrous outside; tube ca. 2.5 × 2 mm, throat ca. 1.2 mm wide, sparsely hairy inside; lobes ovate, ca. 1.2 mm, apparently not revolute. Corona a collar covering bases of anthers, thin when dried. Stigma head conical.

- **800 m. Anhui (Bai Ma Zhai).**


祛风藤  qu feng teng

*Adelostemma microcentrum* Tsiang, Sun yatsenia 2: 184. 1934; *Biondia elliptica* P. T. Li & Z. Y. Zhu.

Lianas, twining to 2 m. Stems, branches, petioles, and peduncles mostly puberulent along 1 side. Petiole 5–10 mm; leaf blade elliptic to oblong-lanceolate, 1–7 × 0.5–1.4(–2.3) cm, papery or nearly so, glabrous except for minutely puberulent midrib adaxially, base minutely rounded to cuneate.


茨菇秦岭藤  ci gu qin ling teng

Internodes densely pubescent along 2 sides. Petiole ca. 6 mm, adaxially puberulent; leaf blade lanceolate, to 6 × 1.2 cm, adaxially with minute pale dots, glabrous except for minutely puberulent veins adaxially, base rounded, apex ± acute, subapiculate; lateral veins 5–7, adaxially slightly raised, at an acute angle to midrib. Inflorescences shorter than leaves; cymes apparently solitary, umbel-like; peduncle 0.2–1.8 cm, subglabrous. Pedicel to 1.1 cm. Sepals ovate, ca. 1.4 × 0.7 mm, glabrous. Corolla tube campanulate, ca. 2.3 mm, longer than lobes; lobes triangular-acuminate, ca. 2 × 1.4 mm, minutely puberulent inside. Corona lobes ± square, reaching base of anthers. Gynostegium ca. 1.4 mm high; pollinia cylindrical, as long as corpusculus.

- **2400 m. Yunnan (Tsui kow).**

apex acuminate; lateral veins 4–7 pairs, usually obscure. Inflorescences shorter than leaves; cymes usually solitary, 4–9-flowered; peduncle (1.5–)3.4–13(–23) mm. Pedicel (1.7–)3.4–(–12) mm. Sepals lanceolate, 1.6–3 × 0.8–1 mm, apex acute, pubescent; basal glands 5. Corolla yellowish white with “purplish” interior, cylindric-urceolate; tube (2.5–)3.5–4 mm, pubescent inside; lobes oblong-lanceolate or oblong-elliptic, 1.2–2 × ca. 1 mm. Corona minute, ringlike. Anther appendages rounded, incurved; pollinia ± cylindrical, slightly curved, ca. 0.4 mm, as long as corpusculus, caudicels short and rigid. Stigma head round/conical, obscurely 2-lobed; ovary glabrous. Follicles oblong-lanceolate, 8–12 cm × 5–7 mm. Seeds oblong, ca. 6 × 2 mm, flat; coma to 3 cm. Fl. Apr-Jul.

- **Open woods, thickets. 800 m. Anhui, Sichuan.**

A decoction of all parts is used as a febrifuge and for the treatment of rheumatism and internal fever.


短叶秦岭藤  duan ye qin ling teng


Lianas to 1 m. Stems gray; branches green, uniformly puberulent. Petiole 1–2 mm; leaf blade narrowly oblong to linear-lanceolate, 2–3.5 cm × 3–7 mm, fleshy, glabrous, base rounded, margin revolute, apex rounded-apiculate to acute; lateral veins invisible abaxially, raised adaxially. Inflorescences shorter than leaves; cymes solitary, 4–6-flowered; peduncle 4–10 mm, glabrescent. Pedicel 3–5 mm, glabrous. Sepals ovate-oblong, puberulent, basal glands 5. Corolla yellow or white, urceolate, 3–3.5 mm, densely pubescent inside, otherwise glabrous; lobes oblong, ca. half as long as tube. Corona 5-toothed. Anther appendages orbicular; pollinia oblong. Stigma head conical. Follicles lanceolate in outline, ca. 9 cm × 5–6 mm. Seeds ovate; coma ca. 1.3 cm. Fl. Jun-Sep, fr. Oct.

- **Montane forests; 2000–2500 m. Henan, Sichuan, Yunnan.**

7. **Biondia crassipes** M. G. Gilbert & P. T. Li in M. G. Gilbert, W. D. Stevens, & P. T. Li, Novon 5: 2. 1995.

厚叶秦岭藤  hou ye qin ling teng

Internodes puberulent along 2 sides and at nodes. Petiole 2–4 mm, adaxially densely puberulent; leaf blade linear-oblong, to 5 cm × 3 mm, base cuneate, apex acute; midvein raised adaxially, lateral veins obscure, glabrous. Inflorescences 2–3.5 cm; cymes mostly 2, separated by rachis ca. as long as pedicels; rachis of cymes slightly elongated, ± fleshy, very sparingly puberulent. Pedicel 6–10 mm. Sepals elliptic, ca. 1.5 × 0.6 mm, sparingly puberulent. Corolla apparently green, campanulate, ca. 2.5 mm, glabrous outside, minutely hairy inside, hairs short, stiff, white; tube ca. 1.5 mm; lobes triangular, revolute, twisted. Corona reduced to inconspicuous collar concealing bases of anthers. Pollinia oblong-reniform. Follicles solitary, narrowly fusiform, ca. 5.5 cm × 4 mm.

- **2700 m. Xizang**

长序梗泰秦藤 chang xu geng qin ling teng
Lianas to 1.5 m. Stems, branches, and petioles pubescent along 1 line. Petiole 2–4 mm; leaf blade linear to linear-lanceolate, 2.5–7 cm × ca. 5 mm, thin papery, glabrous except for puberulent midvein, acuminate at both ends; lateral veins 5–7 pairs, slightly elevated abaxially. Inflorescences shorter than leaves; cymes umbel-like, 4–6-flowered, solitary or 2 separated by rachis to 1.5 cm, glabrous. Pedicel slender, 2–5 mm. Sepals lanceolate, ca. 1.2 × 0.6 mm, pubescent, basal glands 5. Corolla subcampanulate, glabrous; tube ca. 1 mm; lobes oblong, along as long as tube, acute. Corona short 5-toothed. Pollinia reniform. Ovaries oblong, glabrous. Fl. May.

• Thickets; 2500 m. Sichuan (Kangding).


宝兴藤 bao xing teng
Lianas to 1.5 m. Stems, branches, petioles, and peduncles pubescent along 1 side. Petiole 2–4 mm; leaf blade linear to linear-lanceolate, 2.5–7 cm × ca. 5 mm, thin papery, glabrous except for puberulent midvein, acuminate at both ends; lateral veins 5–7 pairs, slightly elevated abaxially. Inflorescences shorter than leaves; cymes umbel-like, 4–6-flowered, solitary or 2 separated by rachis almost as long as peduncle; pedicule to 3 cm. Pedicel slender, 4–6 mm. Sepals lanceolate, ca. 1 × 0.5 mm, pubescent, basal glands 5. Corolla subcampanulate, glabrous outside, pubescent inside; tube ca. 2 mm; lobes oblong, up to as long as tube. Corona ringlike, rim truncate or subundulate. Anther appendages orbicular; pollinia oblong. Fl. Jun.

• Mixed woods along stream banks; 2700 m. Sichuan (Bao-hsien), Yunnan (Likiang).

10. **Biondia revoluta** M. G. Gilbert & P. T. Li in M. G. Gilbert, W. D. Stevens, & P. T. Li, Novon 5: 3. 1995.

卷冠秦岭藤 juan guan qin ling teng
Cheng & Feng (Bull. Bot. Lab. North-East. For. Inst. 8(8): 2. 1980) described material from Anhui and Zhejiang as var. longipe-dunculata, but the name is invalid because the authors failed to designate a type.

12. **Biondia insignis** Tsiang, Sunyatsenia 4: 106. 1939.

黑水藤 hei shui teng
Lianas to 1 m. Branches and petioles pubescent along 1 line. Petiole ca. 1 cm; leaf blade linear-lanceolate to lanceolate, 3–7 cm × 3–15 mm, glabrous except for minute hairs along margin and midrib adaxially, base cuneate to obtuse, apex acuminate to acute; major lateral veins 2 or 3 pairs at an acute angle to midrib and up to 6 pairs of minor veins at a wider angle; older leaves with reticulate abaxial veins thickened and ± white. Cymule solitary, umbel-like, 4–6-flowered; peduncle 0.6–4 cm, slender, glabrous. Pedicel 8–10 mm, glabrous. Sepals ovate; glands absent. Corolla green, 5–6 mm in diam.; tube bowl-shaped, 1.2–2 mm; lobes ovate-oblong, ca. 1.7 × 1 mm, rotate, short pilose or glabrous inside. Corona ringlike, rim shallowly 5-cleft. Anthers orbicular; pollinia oblong, ovoids glabrous. Follicles narrowly lanceolate, ca. 8 cm × 4 mm. Seeds oblong-elliptic, ca. 8 × 2 mm; coma ca. 2.5 cm. Fl. Apr-Jul, fr. Aug-Oct.

• Open woods, thickets; 1200 m. Anhui, Fujian, Jiangxi, Sichuan, Zhejiang.


杯冠秦岭藤 bei guan qin ling teng
Lianas with densely pubescent internodes along 1 side. Petiole to 7 mm; leaf blade lanceolate, ca. 5 × 1.8 cm, glabrous, base rounded, apex acute; lateral veins 5–7 pairs, adaxially slightly raised and minutely puberulent. Inflorescences lax; cymes umbel-like, glabrous, up to 3 along zigzag rachis to 1.7 cm; peduncle to 2.5 cm, glabrous. Pedicel
ca. 1 cm, very slender. Sepals ovate, ca. 1 × 0.5 mm, glabrous. Corolla tube bowl-shaped, ca. 1 mm, much shorter than lobes; lobes triangular-acuminate, ca. 2.5 mm, very minutely puberulent, apex twisted. Corona lobes rounded, to base of anthers.

- Yunnan (Ouei cha).