

5. DICRANOSTIGMA J. D. Hooker & Thomson, Fl. Ind. 1: 255. 1855.

秃疮花属 tu chuang hua shu

Zhang Mingli (张明理); Christopher Grey-Wilson

Herbs, annual or biennial, occasionally short-lived perennial, shortly pubescent or glabrous, yellow lactiferous. Roots narrowly fusiform. Stems terete, few to many branched. Basal leaves many in a rosette, petiolate, pinnatifid, lobes distant, margin undulate or serrate. Cauline leaves alternate, sessile, pinnatifid or with irregular large thick teeth. Flowers terminal, solitary or in few-flowered cymes, ebracteate. Pedicel slender, usually glabrous, ebracteate. Sepals 2, ovate or broadly ovate, glabrous or shortly pubescent, apically acuminate to shortly horned, or spatulate. Petals 4, yellow or orange, obovate or suborbicular. Stamens many; filaments filiform; anthers oblong, 2-celled, longitudinally divided, basifixed. Ovary 1-loculed, 2-carpellate, terete or narrowly so, pubescent or tuberculate; styles very short; stigmas capitate. Capsule terete or linear, shortly pubescent or glabrous, 2-valvate, splitting from apex nearly to base. Seeds many, usually ovoid, small, tessellate, not carunculate.

Three species: China, two in the Himalayas and adjacent areas, one in the Loess Plateau region; three species (two endemic) in China.

- 1a. Capsule linear; calyx usually glabrous outside; ovary densely verrucose shortly pubescent 3. *D. leptopodum*
- 1b. Capsule cylindrical, slightly broader toward base; calyx pilose outside.
 - 2a. Plant 100–200 cm tall; stems glabrous, cauline leaves amplexicaul; capsules glabrous, 6–8 cm; ovary glabrous 1. *D. platycarpum*
 - 2b. Plant 15–60 cm tall; stems shortly pubescent, cauline leaves not amplexicaul; capsules shortly pubescent, 5–6(–11) cm; ovary yellow pubescent 2. *D. lactuoides*

1. *Dicranostigma platycarpum* C. Y. Wu & H. Chuang, Acta Bot. Yunnan. 7: 87. 1985.

宽果秃疮花 kuan guo tu chuang hua

Herbs, 1–2 m tall. Root narrowly conical, 10–15 cm, upper part ca. 1.5 cm in diam. Stems erect, stout, glabrous, basally with dense withered residual leaf bases. Leaves glabrous with netted lateral veins, basal ones several pinnatifid, lobes distant, petiolate, petiolar base with inflated sheath. Lower cauline leaves sessile and almost amplexicaul, oblanceolate or narrowly oblanceolate, 20–27 × 8–14 cm, pinnatifid, lobes 4–6 pairs, distant, bilaterally alternate, margin with irregular thick teeth. Upper cauline leaves broadly ovate, gradually smaller upward, basally amplexicaul, margin with irregular large thick acute to obtuse teeth, apex acuminate. Flowers 1–3. Pedicel ca. 7 cm, to 15 cm at fruiting, glabrous. Flower buds broadly ovoid to suborbicular, ca. 1.5 × 1 cm. Sepals cymbiform, broadly ovate, outside sparsely shortly pubescent, margin membranous on one side, apically acute and extending into spur ca. 1 cm. Petals yellow, obovate, 2–3 × 1.2–1.5 cm. Stamens many; filaments 6–10 mm; anthers oblong, ca. 2 mm. Ovary terete, 1–1.5 cm × 2–3 mm, apex acuminate, glabrous; styles ca. 1 mm; stigmas capitate, 2-divided. Capsule cylindrical, slightly broader toward base, 6–8 × 5–8 mm, glabrous, 2-valvate from apex nearly to base. Seeds ovoid, ca. 1 mm, tessellate. Fl. and fr. Jul–Sep.

- Alpine meadows, rock crevices at ditch sides; 3300–3500(–4000) m. S Xizang (Yadong), NW Yunnan (Lijiang, Zhongdian).

2. *Dicranostigma lactuoides* J. D. Hooker & Thomson, Fl. Ind. 1: 255. 1855.

苣叶秃疮花 ju ye tu chuang hua

Chelidonium dicranostigma Prain, nom. illeg. superfl.; *C. lactuoides* (J. D. Hooker & Thomson) Prain; *Glaucium lactuoides* (J. D. Hooker & Thomson) Bentham & J. D. Hooker;

Stylophorum lactuoides (J. D. Hooker & Thomson) Baillon.

Herbs, biennial or short-lived perennial, 15–60 cm tall, shortly pubescent. Roots 10–15 cm, upper part ca. 1.2 cm in diam., with dense withered leaf bases. Stems 3 or 4, ascending to spreading, sparsely villous. Basal leaves in a rather flat rosette; petiole 3.5–5 cm, winged, sparsely shortly pubescent; blade glaucous adaxially, paler abaxially, 12–25 × 3–5 cm, both surfaces sparsely shortly pubescent, pinnatifid or pinnatifid, lobes with thick, mucronate teeth or base entire. Upper cauline leaves sessile, 3–8 × 2.5–4 cm, otherwise like basal leaves but smaller. Flowers solitary or several in a lax cyme, bracteate. Pedicel 5–7.5 cm. Flower buds ovoid, 1.5–2 cm. Sepals broadly ovate, 1.5–2 cm, shortly pubescent, margin membranous. Petals yellow or orange-yellow, broadly obovate, 2–2.5 × 1.5–2 cm; filaments 5–7 mm; anthers yellow, linear-oblong, 2–3 mm. Ovary narrowly oval, 7–10 mm, shortly pubescent; styles 2–3 mm. Capsule cylindrical, slightly broader toward base, 5–6(–11) cm × 5–8 mm, shortly pubescent, both ends acuminate. Seeds ovoid, small, tessellate. Fl. and fr. Jun–Sep.

- Stony slopes, rock crevices, riverside rocks, stabilized moraines; (2900–)3700–4300 m. NW Sichuan (Barkam, Garzê), S Xizang [N India, Nepal].

3. *Dicranostigma leptopodum* (Maximowicz) Fedde, Bot. Jahrb. Syst. 36(Beibl. 82): 45. 1905.

秃疮花 tu chuang hua

Glaucium leptopodum Maximowicz, Mélanges Biol. Bull. Phys.-Math. Acad. Imp. Sci. Saint-Petersbourg 9: 714. 1876; *Chelidonium franchetianum* Prain; *C. leptopodum* (Maximowicz) Prain; *Dicranostigma franchetianum* (Prain) Fedde.

Herbs, biennial to short-lived perennial, 25–80(–100) cm tall, throughout yellow lactiferous, shortly pubescent, rarely glabrous. Taproot terete. Stems many, green, glaucous, apex with many equal branches. Basal leaves in a rosette; petiole strip-form, 2–5 cm, sparsely shortly white pubescent, several striate; blade pale green abaxially, green adaxially, narrowly oblanceolate, 10–15 × 2–4 cm, sparsely shortly white pubescent, pinnatifid; lobes 4–6 pairs, pinnatifid or pinnatilobate again; lobules apically acuminate, apical lobules 3-lobed. Cauline leaves few at stem apices, sessile, 1–7 cm, pinnatifid, pinnatilobate, or bipinnatifid; lobes sparsely serrate, apex deltoid-acuminate. Flowers in cymes of 2–5, sometimes solitary. Pedicel 2–2.5 cm, glabrous, bracteate. Flower buds broadly ovoid, ca. 1 cm. Sepals ovate, 0.6–1 cm, apically acuminate to shortly horned, spur end obviously ampliate spatulate, glabrous or shortly pubescent. Petals slightly overlapping, yellow, obovate to orbicular, 10–20 × 10–13 mm, undulate. Stamens many; filaments 3–4 mm; anthers yellow, oblong, 1.5–2 mm. Ovary green, narrowly terete, ca. 6 mm, densely verrucose-pubescent; styles erect, short; stigmas 2-divided. Capsule green, linear, 4–7.5 cm × ca. 2 mm, glabrous, 2-valvate from apex almost to base. Seeds rufous, ovoid, ca. 0.5 mm, tessellate. Fl. Mar–Jul, fr. Jun–Sep. $2n = 12^*$.

• Grassy slopes and roadsides, field ridges, corners of walls, housetops, rocky embankments; 400–2900(–3700) m. S to SE Gansu, SW Hebei, NW Henan, E Qinghai, Shaanxi (N Qin Ling), S Shanxi, NW and W Sichuan, N Xizang, NW Yunnan.

One of us (Grey-Wilson) notes that typical *Dicranostigma leptopodum* is a rather small plant (25–50 cm tall) with petals rarely more than 14 mm. The status of *D. franchetianum* is unclear and requires further investigation; plants are generally more robust than *D. leptopodum* (to 1 m) and bear larger flowers, with petals 15–20 mm. However, the two taxa appear to be linked by intermediates. In cultivation, *D. franchetianum* behaves as an annual.

The status of *Dicranostigma henanense* S. Y. Wang & L. H. Wu (Bull. Bot. Res., Harbin 17: 43. 1997, “*henanensis*”), described from Henan, is uncertain and requires further investigation. It will probably prove to be a form of the very variable *D. leptopodum*.

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