

A. Inner involucrel bracts mostly acute at the apex, greenish or yellowish, sparsely to strongly hirsute; pappus setae grayish at least at the apex.

C. Leaves runcinate-pinnatifid; inner bracts densely hirsute; pappus setae 12–14 mm long; Yunnan and adjacent Tibet.....c. subsp. *hirsuta*

C. Leaves sinuate-pinnatifid, sinuate-dentate, or merely denticulate; inner bracts sparsely to moderately hirsute; pappus setae 10–15 mm long; western Himalaya.....
.....d. subsp. *occidentalis*

7-a. *Soroseris Gillii typica* nom. nov. (Fig. 11, *a-b*)—Leaves runcinate-pinnatifid, the blade 3–8 cm long, 0.7–1.8 cm broad; inflorescence flat, cymose, the heads very numerous, on peduncles 2–12 mm long; involucre 13–17 mm long, the inner bracts glabrous or rarely short-pubescent, dark green or blackish at least toward the apex, the apex obtuse or rounded; corolla tube 8–10.5 mm long, the ligule 9–12 mm long; anthers 5–6 mm long; achenes 3–6 mm long; pappus setae 13–16 mm long, rufous. Chromosome number, $2n = 16$. (*Crepis trichocarpa* Franch., Jour. de Bot. 9: 257, 1895 (?); *Crepis Gillii* S. Moore, Jour. Bot. 47 (1899): 170; Hand.-Mazz. Acta Horto. Goth. 12: 355, 1938, pro parte, vars. *erysimoides* et *bellidifolia* exclusae).

Western China and adjacent Tibet. The following have been seen:

CHINA: Szechuan Prov.; near Tachienlu, *Pratt 456, 482, 875* (K); Tatsienlu, *Soulié 2160* (B); Tongolo, *Soulié 2663, 2664* (B); Baurong to Tachienlu via Hadjaha, *Stevens 178, 379* (B); Mt. Mitzuga, west of Muli Gomba, alt. 3050–4875 m, *Rock 16242* (B); north of Chiu-Lung-Hsien, Minya Country, alt. 5000 m, *Rock 17449* (B); between Litang and Yalung Rivers, alt. 4400 m, *Rock 16630* (B); between Litang and Shou-Chu Rivers, alt. 4510 m, *Rock 16756* (B); Kaushu shan, Leirong, alt. 4090 m, *Rock 24094, 24502* (UC). TIBET: between Labrang and Yellow River, alt. 3700 m, *Rock 14529* (UC, B, K). The last specimen transitional toward subsp. *occidentalis*.

Handel-Mazetti (loc. cit.) rejected Franchet's *Crepis trichocarpa* on the grounds that the type specimen did not possess pubescent achenes as described and emphasized by Franchet. The writer has not seen this type, but since pubescent achenes have not been seen on any species of this genus, the opinion of Handel-Mazzetti, that Franchet's description is based on a *planta composita*, is probably correct.

7-b. *Soroseris Gillii Handellii* subsp. nov. (Fig. 11, *c-d*)—A subsp. *typica* differt involucre 11–12 mm longis, phyllis interioribus ad apicem sparse hirsutis; corollis 15–16 mm longis, tubo 7–8 mm, ligula 8.5–9 mm longa; antheris 4 mm longis; pappi setis 10–10.5 mm longis.

Leaves runcinate-pinnatifid or sinuate-dentate, the blade 2–4 cm long, 0.5–1.3 cm broad; involucre 11–12 mm long, the inner bracts dark green or blackish, sparsely hirsute toward the apex, the apex obtuse or rounded; corolla tube 7–8 mm, the ligule 8.5–9 mm long; anthers 4 mm long; pappus setae stramineous or rufous, 10–10.5 mm long.

Southwestern China. The following have been seen:

CHINA: southwestern Szechuan, Döko range, above Muli monastery, alt. 4350 m, *Handel-Mazzetti 7417* (type, B); Yunnan, Che-tse-lo, top of Pi-lo-shan, alt. 4000 m, *Tsai 58037, 58192* (UC, G).



Fig. 11. *a-h*, *Soroseris Gillii*: *a-b*, subsp. *typica*, from Rock 16630 (UC): *a*, leaf, $\times 1$; *b*, involucre, $\times 2$; *c-d*, subsp. *Handelii*, from type (B): *c*, leaf, $\times 1$; *d*, involucre, $\times 2$; *e, f*, subsp. *hirsuta*, from Forrest 19054 (B): *e*, leaf $\times 1$; *f*, involucre, $\times 2$; *g, h*, subsp. *occidentalis*, from type (K): *g*, leaf, $\times 1$; *h*, involucre, $\times 2$. *i-n*, *Soroseris Hookeriana*: *i-l*, subsp. *erysimoides*, from Rock 12645 (UC, G): *i*, habit, $\times \frac{1}{2}$; *j*, leaf, $\times 1$; *k*, involucre, $\times 2$; *l*, corolla, $\times 4$; *m-n*, subsp. *typica*, from Hooker, s.n. (K).

This subspecies differs from subsp. *typica* chiefly in its smaller heads and florets. The former is very constant in the size of the floral parts, however, while the two specimens cited under subsp. *Handelii*, both of them collected south of the range of subsp. *typica* are also closely similar in this respect. Subsp. *Handelii* forms a morphological transition from subsp. *typica* to subsp. *occidentalis*, resembling the latter as much as the former.

7-c. *Sorosseris Gillii hirsuta* (Anthony) comb. nov. (Fig. 11, e-f)—Leaves, inflorescence, and involucral bracts conspicuously hirsute; leaves runcinate pinnatifid, the blade 2–4.5 cm long, 0.5–1.3 cm broad; involucre 12–15 mm long, the inner bracts acute at the apex, yellowish-green in color, densely hirsute with long, whitish trichomes; corollas 15–19 mm long, the tube 5.5–6.5, the ligule 9–12 mm long; anthers 4.8–5 mm long; pappus setae 12–14 mm long, stramineous but grayish toward the apex. (*Crepis Gillii* var. *hirsuta* Anthony, Notes Bot. Gard. Edinb. 18: 193. 1934.)

Northwestern Yunnan and southeastern Tibet. The following have been seen:

CHINA: Yunnan Prov., Bei-ma Shan, alt. 4240 m, *Forrest 14500* (B); northeast of Atuntze, alt. 4240–4540 m, *Forrest 20059* (UC, B); Mekong-Salwin divide, alt. 4090–4240 m, *Forrest 20088* (B); Mekong-Yangtze divide, east of Yeh-chih, alt. 4090–4240 m, *Forrest 20367* (part, B). TIBET: Salwin-Kiu-chiang divide, Tsarong, *Forrest 19054* (B).

This subspecies differs from subsp. *typica* only in the pubescence of the plant, the shape and color of the inner bracts, and the color of the pappus, but each subspecies is quite constant in these respects within its range.

7-d. *Sorosseris Gillii occidentalis* subsp. nov. (Fig. 11, g-h)—Folia lanceolata, 2–4 cm longa, 0.5–1 cm lata, apice acuta, runcinato-pinnatifida, dentata, vel integra; involucre 11–14 mm longa, phyllis interioribus hirsutis; achaenia 5–6.5 mm longa; pappi setae 11–12.5 mm longae, ad apicem griseae, ad basim stramineae.

Leaves on slender petioles, the blade lanceolate, 2–4 cm long, 0.5–1 cm broad, acute at the apex, shallowly runcinate-pinnatifid, coarsely dentate, or sometimes merely denticulate; involucre 11–14 mm long, rather lightly hirsute or occasionally glabrate; achenes 5–8.5 mm long, reddish brown; pappus setae 11–12.5 mm long, gray at the apex, stramineous toward the base. (*Crepis glomerata* Hook. f., Fl. Brit. India 3: 398, in part, not *Prenanthes glomerata* Decne.)

Western Himalaya in Kumaon, Garwhal, and adjacent Tibet. The following have been seen:

INDIA: Garwhal Province (Tehri) Gangotri, alt. 4240–4550 m, *Keshavanand 31* (K, type; DD); Dudu Gadh, alt. 4550–4700 m, *Duthie 824* (K, DD); Kala-jowar, *Strachey and Winterbottom 2* (G); Kumaon Province, Ralam Valley, *Duthie 24526* (K, DD); Barji Kang, *Strachey and Winterbottom 2* (K). TIBET: Meyin Madden, *Strachey and Winterbottom 2* (K).