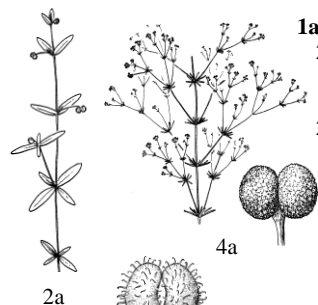


Key revised to include *Galium parisiense*.

Galium L. Bedstraw; Cleavers

Infl gen cymose, small or large, or fls on axillary peduncles; fls ♀ or ♂ or ♀; calyx absent; corolla funnell to rotate, the 3–4 lobes ≥ tube, valvate; ovary 2-celled, with a solitary ovule attached near middle of septum in each cell, styles 2, short, stigmas capitate; fr dry (ours) or fleshy, 2 mericarps, the carpels approximate or divergent, indehiscent; ann or per herbs, occ subshrub, with square sts and entire lvs, 4–14 in a whorl (upper lvs merely opp in some spp.), gen exstip except insofar as some of the lvs of each whorl may be enlarged stip. (Gr *gala*, milk, from the use of *G. verum* for curdling).

Galium humifusum M. Bieb. historic (1920s) waif coll in Klickitat Co, WA; *G. labradoricum* (Wiegand) Wiegand app our area in sc BC; *G. murale* (L.) All. rarely coll as waif in sw BC; *G. parisiense* L., misapplied in the 1st ed., app our area in s OR. See also *Cruciata*.



1a Pls ann from a short taproot

2a Lvs 2–4 in a whorl; corolla gen 3-lobed; fls solitary in axils on elongating peds; st glab; fr 2–4 mm, with uncinete hairs; pls gen mont; BC s, mostly in and e Cas, and in OM, to CA, e to RMS and SD; twinlf or low mt b. **1** *G. bifolium* S. Watson

2b Lvs gen 5–8 in a whorl; corolla 4-lobed; fls on 3–5-fld axillary peduncles or in more open infls; st retrorsely scab or rarely glab; frs diverse; habitat various

3a Frs very small, 1–1.5 mm; pls tending to be freely br; peds filiform

4a Frs granular-roughened; infls loosely ∞-fld; lf margins becoming strongly revolute, entire lf becoming folded under; lvs gen weakly reflexed; European intro; sw BC s, lowl w Cas, to CA, also in c and e US; Lamarck's b. (*G. anglicum*, *G. parisiense* var. *leiocarpum*, *G. parvifolium*)

2 *G. divaricatum* Pourr. ex Lam.

4b Frs smooth or with short, uncinete hairs; infls loosely few-fld; lf margins not revolute or folding under; lvs gen reflexed in age; European intro; sw BC, mostly CRG and Wi Va in our area, otherwise s OR to CA; wall b.

3 *G. parisiense* L.

3b Frs larger, 2–5 mm; pls gen not much br; infls with relatively few fls, peds stout; lf margins flat or only edges minutely revolute

5a Frs with uncinete hairs, or very rarely glab; peds divaricate or ascending, straight; peduncles ≥ the subtending whorl of lvs; lvs gen uncinete-hispid above; lowl to mont; widespread throughout our area, N Am, and worldwide; catchweed b., c., goose grass, stickywilly (*G. a.* var. *echinospermum*, *G. spurium*, *G. vaillantii*)

4 *G. aparine* L.

5b Frs scab-muricate; peds strongly recurved in fr; peduncles ≤ the subtending whorl of lvs; lvs gen glab above (except margins); disturbed, open areas at low elev; Eurasian intro; historic colls from CRG and Wi Va, naturalized in CA; rough-fr corn b. (*G. tricorne*, an illegitimate name) **5** *G. tricornutum* Dandy

1b Pls per from creeping rhizomes (*G. trifidum* sometimes appearing ann)

6a Frs covered with uncinete hairs, or in no 8 the fr sometimes merely muricate-scab

7a Lvs 4 in a whorl, evidently 3-nerved; sts erect

8a Sts with gen 2–4(5) whorls of lvs; infl few-fld, fls gen 2–3 on each of the 1–3 terminal peduncles; lf base evidently narrow, ± cuneate, the margins tending to be concavely rounded; moist for; AK to OM and w Cas, WA, and in e Can; Eurasia; boreal b., n wild licorice

6 *G. kamschaticum* Steller ex Schult. & Schult. f.

8b Sts with gen 5–8(9) whorls of lvs; infl ∞-fld, fls > 3 on each of the terminal peduncles, tending to be cymosely br, upper axils often with infls in addition to terminal peduncles; lf base wider, the margins tending to be convexly rounded; moist for; Cas and w, WA to n CA; OR b.

7 *G. oreganum* Britton

7b Lvs gen 5–8 in a whorl, 1-nerved; sts gen prostrate, ascending, or scrambling on other vegetation

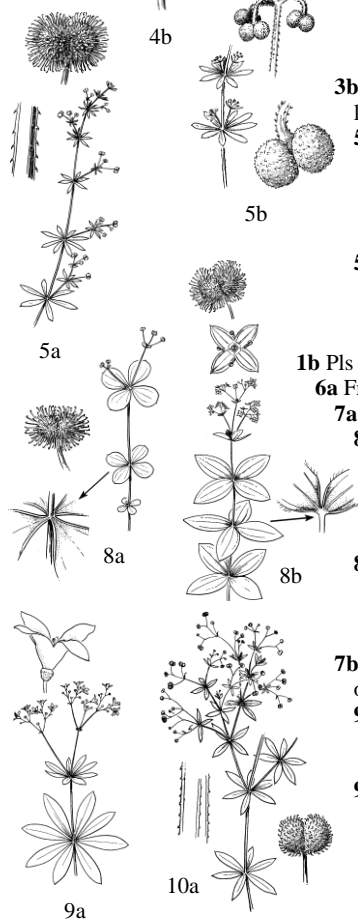
9a Lvs gen 8 in a whorl at mid-st; corolla 3–6 mm long; lowl for, often distrubed; European intro, occ escaping cult; BC s, w Cas, to OR; sweet woodruff, sweet-scented b. (*Asperula o.*)

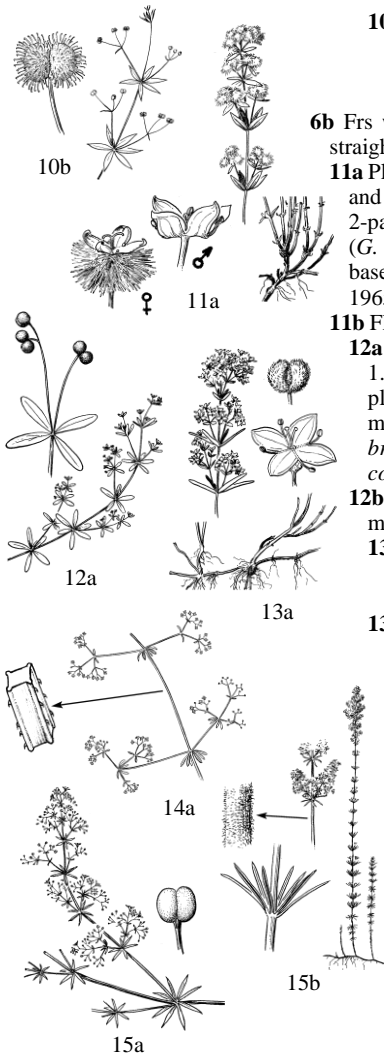
8 *G. odoratum* (L.) Scop.

9b Lvs gen 6 in a whorl at mid-st; corolla 1–2 mm long

10a Bristles of fr very short, only 0.15–0.3 mm, or the fr sometimes merely muricate-scab, with the short bristles very stout and scarcely hooked; infls gen open, many-fld, br, and ± lfy-bracteate at ends of main st and brs; wet places; WA to CA, e to RMS and TX; Mexican b.; ours subsp. **asperulum** (A. Gray) Dempster (*G. asperillum*)

9 *G. mexicanum* Kunth





10b Bristles of fr longer, gen 0.5–1.0 mm; infls on axillary peduncles, each peduncle gen 3-fld, or the peduncles sometimes cymosely br and several-fld; moist for; circumboreal, s both sides Cas, to CA, e to Atl; common and widespread; sweetscented or fragrant b. **10 *G. triflorum* Michx.**

6b Frs without uncinete hairs, either glab or with short, curved upwards to long, straight hairs

11a Pls ♂, ♀; ♂ fls with reduced ovaries and wanting styles; ♀ fls with young ovaries and frs conspicuously pubescent with long, spreading, straight hairs and evident 2-parted styles; dry slopes; e Cas, WA to CA, e to ID and NV; Intermountain b. (*G. bloomeri*, *G. multiflorum*, *G. watsonii*); 6 subsp. described from our area based on microscopic features and geographic region (Dempster and Ehrendorfer 1965) **11 *G. serpenticum* Dempster**

11b Fls ♀; frs and young ovaries glab or in no 12 rather inconspicuously short-hairy

12a Fls solitary or few in small, rather inconspicuous infls; corolla 3(4)-lobed, 1–1.8 mm wide; sts weak, tending to recline or scramble on other vegetation; wet places at low to moderate elev; circumboreal, s both sides Cas, to CA, e across most of N Am to Atl; widespread and common; Pac, small, or three-petal b. (*G. brandegeei*, *G. cymosum*, *G. subbiflorum*, *G. t.* var. *pacificum*, *G. t.* subsp. *columbianum*, s.) **12 *G. trifidum* L.**

12b Fls ± ∞ in compound and much br, rather showy infl; corolla 4-lobed, 2–7 mm wide; sts prostrate or ascending to more often erect

13a Lvs 3-nerved, 4 in a whorl; frs short hairy, hairs curved up to straight, or occ glab; circumboreal, s chiefly e Cas, to CA, e across most of N Am to Atl; northern b. (*G. septentrionale*) **13 *G. boreale* L.**

13b Lvs 1-nerved, 4–8(–12) in a whorl; frs glab

14a Lvs gen 4–6 in a whorl, not cuspidate; sts glab but often minutely retrorse hispid on angles; wet places at low elev; sw BC to s PT, e to se BC and w MT; common marsh b. **14 *G. palustre* L.**

14b Lvs gen in whorls of 6–8(–12), cuspidate; sts glab or puberulent throughout; Eurasian intros, scattered throughout our area

15a Fls white; sts glab in infl; lvs broadly linear to linear-oblong or oblanceolate; disturbed, open areas at low elev; BC to CA, e to ID, MT, WY and UT, also in e N Am; wild madder, hedge b., false baby's breath **15 *G. mollugo* L.**

15b Fls bright yellow; sts gen puberulent or hirtellous, at least in infl; lvs narrowly linear; disturbed, open areas at low elev; Eurasian intro, often escaping cult; BC to CA, e across n US and Can to Atl; lady's or yellow spring b.; hybridizes with *G. humifusum* M. Bieb. **16 *G. verum* L.**