

Galium angustifolium A. Gray subsp. *angustifolium*, NARROW-LEAVED BEDSTRAW, NARROWLY LEAVED BEDSTRAW. Shrub, drought-deciduous, many-stemmed at base, much-branched throughout, tangled but not clinging to itself, with a rounded canopy, 40–120 cm tall; dioecious; shoots with thin green stems and brittle, weak woody stems, in range densely puberulent with firm, erect or leaning hairs < 0.3 mm long, not scabrous, lacking curved, sharp prickle-hairs. **Stems:** 4-sided (squamish in \times -section) with 4 rounded ridges, green stems 0.8–2 mm diameter, with ridges descending from leaf midribs, the ridges of each internode offset 45° from adjacent internode, nearly glabrous to covered with erect short hairs, internodes 5–40 mm long, not swollen above a flowering node, often with a puberulent, purple ring beneath each node; basal stems with periderm, 5+ mm diameter. **Leaves:** whorled, 4 leaves fused at node (rarely with 5 at a node) but strictly 4-ranked (along 4 ridges), ascending in bud becoming spreading, simple, sessile, with stipules; stipules 2 indistinguishable from blades in whorl (treated here as leaves); blade linear to lanceolate-linear, 3–19 \times 0.8–2 mm, flat, fused bases short, entire, acute with short point at tip, only midrib visible and raised on lower surface, glabrous to sparsely puberulent. **Inflorescences:** dichasial cymes, axillary, cymes 1 or 2 per node, if 2 often unequal, cyme several–many-flowered, bracteate, densely puberulent with firm, erect hairs; peduncle = stemlike internode; bracts at first node 4 in whorl, bracts at higher nodes typically 2 and opposite, leaflike but shorter, elliptic to oblanceolate, to 3 mm long; bractlet subtending pedicel of lateral flower elliptic to oblanceolate, 0.5–1 mm long, bractlet absent below terminal flower, green, puberulent; pedicel 0.5–1 mm long, aging < fruit. **Staminate flower:** radial, 2.5–3 mm across; bud 4-sided and typically light green with or without purplish red blotches on lobes; **perianth (corolla)** of 1 whorl, (3–)4-lobed, cymbal-shaped (rotate), pale yellowish green to pale yellow mostly lacking purplish red; tube \pm 0.4 mm long; lobes spreading, ovate (broadly ovate if 3-lobed), 1.2–1.4 mm long, acute with short point at tip, the point incurved in bud later spreading, with 3 veins converging near tip with midvein continuous to tip, glabrous or with several short hairs on lower surface (below midpoint in bud), short-papillate on outer (lower) surface and margins; **stamens** (3–)4, fused to corolla near top of tube, alternate with lobes; filaments ascending to spreading, ca. 0.4 mm long, whitish; anthers dorsifixed, dithecal, \pm 0.4 mm long, light yellow, longitudinally dehiscent; pollen yellow; **nectary disc** on top of ovary vestigial; **pistil** vestigial. **Pistillate flower:** \pm radial, 2.3–3 mm across; bud less angular than of staminate flower and typically light green with or without purplish red blotches on lobes; **perianth (corolla)** of 1 whorl, 4(–5)-lobed, cymbal-shaped (rotate), light yellow-green mostly lacking purplish red (lower surface); tube \pm 0.4 mm long; lobes spreading, ovate (narrowly ovate if 5-lobed), 1–1.2 mm long, acute with short point at tip, the point incurved in bud later spreading, with 3 veins converging near tip with midvein continuous to tip, glabrous or with several short hairs on lower surface (below midpoint in bud), short-papillate on outer surface and margins; **stamens** vestigial and sterile; **nectary disc** surrounding style on top of ovary, broadly 4-lobed, yellowish green, papillate; **pistil** 1; ovary inferior, 2-lobed, ca. 1.2 mm long, lobes compressed-hemispheroid, 0.6 mm thick, pale green to pale yellowish green, covered on outer faces with conspicuous, straight white hairs 1–1.5 mm long, 2-chambered, each chamber with 1 ovule; style 2 (fused), 0.4–0.9 mm long, pale green to pale yellowish green, 2-branched 1/3 to below midpoint, the branches spreading to ascending; stigmas kidney-shaped to triangular, papillate. **Fruits:** schizocarp, 2-

chambered forming 2 dry, 1-seeded nutlets (mericarps) with fruit wall \pm fused to seed coat; mericarp dark brown covered with dense, radiating, bristlelike hairs, including hairs 3–3.8 mm long, the hairs straight, to 1.5 mm long, initially white aging tawny. Late February–late July.

Native. Brittle-stemmed shrub common throughout the range in chaparral and coastal sage scrub. *Galium angustifolium* subsp. *angustifolium*, which includes overlapping distributions of diploid and tetraploid populations, has four leaves per node, but unlike *G. nuttallii*, the plant does not have hooklike (retrorse) prickly-hairs, so the shoots do not stick to clothing. Within a local population can occur nearly glabrous to pubescent individuals. Staminate plants can often be spotted by having denser flowers than the pistillate plants, and pistillate plants are easy to identify because bristlelike white hairs are present on the ovaries and developing fruits. Normally flowers have four corolla lobes, but on a single individual there may also be flowers with three lobes (staminate plants) or five lobes (pistillate plants). Subspecies *foliosum* occurs on the northern offshore islands and presumably has been collected also in Ventura County; to date this subspecies is not definitively known in the SMM. Careful study in the western SMM should be conducted where also occurs the listed Santa Cruz lacepod (*Thysanocarpus conchuliferus*), to search for subsp. *foliosum*, which has slender leaves that tend to be longer than the internodes.
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