

Poterium sanguisorba L., GARDEN BURNET, SMALL BURNET. Perennial herb, taprooted with woody caudex, rosetted, 1–several-stemmed at base (caudex with basal rosettes of several shoots), erect shoot with lateral branches at nodes and each branch with a terminal inflorescence, 25–70 cm tall; polygamomonoecious; shoots with spreading basal leaves and ascending cauline leaves, glabrescent or with scattered hairs (sparsely pilose), not glandular; caudex short-branched. **Stems:** ± cylindric, to 3.5 mm diameter at base, with a slight ridge descending from each leaf, green. **Leaves:** helically alternate, odd-1-pinnately compound, 7–25-foliolate with cauline leaves reduced, lateral leaflets subopposite (opposite) to alternate along rachis, petiolate, with stipules; stipules 2, projecting on basal leaves as petiole wings, papery and 2-lobed, 3.5–6 mm long, on each leaf arising at different levels from 3–8 mm from petiole base, of cauline leaves lacking petioles stipules appearing free arising from leaf base; petiole flattened, to 40 mm long, flared and winged at base with several prominent veins; rachis to 170 mm long; petiolules slender, of lateral leaflets 2–5 mm long, of terminal leaflet 5–8 mm long; blades of leaflets roundish to oval or ovate, in range 5–13 × 5–11 mm, asymmetric and oblique to truncate or broadly tapered and symmetric at base, regularly serrate on margins with acute teeth 0.8–2 mm long, terminal tooth often acuminate and shorter than adjacent teeth (± recessed), pinnately veined with principal veins slightly sunken on upper surface and slightly raised on lower surface, with principal vein terminating in each tooth, lower surface sparsely pilose aging glabrescent. **Inflorescence:** headlike spike, terminal on long peduncle, ovoid to spheroid, in range 8–20 × 7–12 mm, several–30-flowered, flowers tightly packed, including staminate (lower flowers), bisexual (sometimes several middle flowers), and pistillate forms (upper flowers), bracteate, glabrous; bract subtending lateral branch leaflike, decreasing upward; peduncle 30–110 mm long (the longest on the first inflorescence); bractlet + 2 lateral bracteoles subtending flower, ± papery, obovate, 2–3 mm long, folded upward from midvein, conspicuously ciliate (hairs conspicuous between flower buds), often remaining loosely adherent to wings on fruit. **Flowers:** staminate, bisexual, or pistillate, radial, 3 mm across; hypanthium cup-shaped and 4-ridged, ca. 1.2 × 0.8 mm, ridges golden brown and densely puberulent; **sepals** 4, obovate to roundish, in range 3–5 × 2.3–3.2 mm, obtuse with tuft of short hairs at tip, greenish brown tinged red above midpoint where exposed, 3-veined from base, lacking glandular hairs; **petals** absent; **stamens** 12–20, free, erect, arising from hypanthium rim; filaments threadlike, to 3 mm long, yellowish; anthers basifixed, dithecal, 0.5–0.8 mm long, wider than long, longitudinally dehiscent; **pistils** 2(–3); ovaries superior, ovoid, ca. 0.8 mm long, each pistil 1-chambered with 1 ovule; style terminal, ± 1.2 mm long, narrow at base to wider approaching stigmas, stigma brushlike, rose red. **Fruit:** achenes 2(–3), enclosed in dry, stonelike hypanthium (pometum), hypanthium urn-shaped to rhomboid or pear-shaped, 3.5–5 mm long, with 4 vertical wings and having a raised network and sculptured between the yellowish ochre wings; achenes hemi-ovoid, 2.6–3 × 1.5–1.8 mm, brown, acuminate at tip, flat on appressed face. Late June–late August.

Naturalized. Perennial herb of cultivation known historically as a rare weed of disturbed soil on reseeded burns, at Trippet Ranch and in Mandeville Canyon, Malibu Canyon, and Topanga State Park. *Poterium sanguisorba*, a Linnean name, until recently has most commonly been treated as a form of *Sanguisorba minor* Scop., but that binomial has been

rejected for legal reasons. Garden burnet has pinnately compound leaves somewhat resembling *Horkelia cuneata*, but has flowers in a headlike spike and lacks petals. Flowers in the spike are both unisexual and bisexual. Typically, the lower set of flowers is staminate, the upper flowers are pistillate, and there may be bisexual flowers between the two sets. When in bud, the hairs that one observes between the flowers are the ciliate margins of bractlets. The fruit is a hard (indurate) hypanthium with four wings, containing generally two achenes.

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