

Glycyrrhiza L. LICORICE

Glycyrrhiza lepidota Pursh, WILD LICORICE. Perennial herb, forming clonal thicket, unarmed, rhizomatous, several-stemmed at base arising from each rhizome tip, bushlike when flowering with much branching from axillary buds, ascending, in range 70–120 cm tall; shoots with only cauline leaves, \pm viscid, glandular with pubescent hairs and dotted with small, blisterlike glands, with strong aroma of licorice; rhizomes shallow, horizontal, to 15 mm diameter, seldom branching, with pale brown periderm, in \times -section with soft, whitish tissues. **Stems:** angular and ridged when young, less so with age, to 7 mm diameter, with ridge descending from each leaf, green developing red stripes, internodes 30–100 mm long, resinous from stalked glandular hairs and blisterlike glands. **Leaves:** helically alternate, odd-1-pinnately compound with 9–17(–19) leaflets having paired lateral leaflets, 80–200(–240) mm long, petiolate, with stipules; stipules 2, attached below pulvinus at petiole-stem junction, narrowly triangular to wing-shaped, (3–)5–7(–10) mm long, green, deciduous; petiole 26–32 mm long, with small pulvinus at base; rachis ridged and narrowly channeled, 92–124 mm long, whitish on upper side, pubescent with nonglandular hairs and stalked glandular hairs and blisterlike glands; stipules absent; petiolules 1–2 mm long, green, pubescent primarily on upper surface; blades of leaflets lanceolate to narrowly ovate or elliptic, (15–)28–53 \times 12–21 mm, terminal leaflet $>$ lateral leaflets, entire, acute with short point at tip, pinnately veined with principal veins sunken on upper surface and midrib raised on lower surface, densely dotted with greenish, blisterlike glands. **Inflorescence:** raceme, axillary, with 20–50+ flowers in tight, dense, helical clusters of ca. 5 flowers separated by \pm 3 mm internode, clusters loose and poorly defined at base, bracteate, very resinous from glandular hairs; peduncle 25–60 mm long increasing with age, often with reddish veins; rachis ridged, 15–45 mm long; bractlet subtending pedicel narrowly lanceolate, 3–8.5 mm long, membranous and wavy on margins, glandular-pubescent; pedicel 0.5–1 mm long. **Flower:** bisexual, bilateral, papilionaceous, 3.5–4 mm across (banner mostly folded); **calyx** 5-lobed, 7–8 mm long; tube 3–6 mm long, shorter on lower side; lobes unequal, narrowly triangular, dotted with sunken glands, glandular-pubescent, upper lobes partially united and with tips free for 2–3 mm; **petals** 5, white greenish at base; banner not clawed, elliptic-obovate, in range 10–12.5 \times ca. 6 mm, folded but flaring later, white with pale lavender at tip, base firmly cupping ovary base (collecting nectar); wings 2, clawed, weakly spreading at tip, claw 2.5 mm long, white, limb oblong, 4.5–7 mm long, white to greenish with exposed portion blushed light lavender, each with a short, swollen, basal lobe not locked or fused with keel; keel of 2 partially fused petals, 8–8.5 mm long, claw 2.5 mm long, greenish, limbs fused on lower margin 3 mm to tip; **stamens** 10, diadelphous (9 fused and 1 free), 7–7.5 mm long, included; filaments unequal, the fused filaments united as a sheet to midpoint around ovary, greenish; anthers basifixed, dithecal, dimorphic, alternating \pm 0.5 mm long and \pm 0.2 mm long, light yellow, longitudinally dehiscent; pollen whitish; **nectary** at base of ovary and fused stamens, green, producing copious, thin nectar; **pistil** 1, \pm 8 mm long; ovary superior, lanceoloid, ca. 3 mm long, green, glandular-hairy, with numerous vertical rows of developing prickles, the prickles initially upward-curved, short–0.3 mm long, greenish, 1-chambered with 6–8 ovules attached to upper side; style 4.5 mm long, pale green, suture line of ovary continuing as groove along style (at least along base of style),

straight except abruptly curved above stamens; stigma terminal, dark green. **Fruit:** pod (legume), indehiscent and burlike, 2–4-seeded, ellipsoid, 12–15 mm long including persistent beak (style), brown, densely covered with radiating, upward-hooked prickles ca. 2 mm long, with spheric glandular-hairs among bristle bases; beak \pm straight, ca. 4 mm. **Seed:** kidney-shaped, \pm 2.5 mm long, purplish brown. Early May–late June.

Native. A robust perennial herb growing in hard loam, currently known from Malibu Creek State Park (SMM) and Wildwood Regional Park (SH), but perhaps occurring elsewhere. *Glycyrrhiza* is the genus from which licorice is obtained, from rhizomes. This species has blisterlike glands on exposed organs and a burlike fruit with radiating, hooked prickles.

B. A. Prigge & A. C. Gibson