

Lythrum L. LOOSESTRIFE

Lythrum hyssopifolia L., HYSSOP LOOSESTRIFE. Annual or biennial herb, taprooted + fibrous-rooted along prostrate lower stems, several-stemmed at base, ascending to erect, 15–60 cm tall; shoots glabrous. **Stems:** angled, < 4.5 mm diameter, with 4–6 membranous, winglike ridges having 2 ridges descending from each leaf, green. **Leaves:** helically alternate but often opposite at lower nodes of axillary shoots, simple, subsessile or sessile, without stipules; petiole < 0.5 mm long; blade oblong to narrowly elliptic, typically 10–25 × 2–8 mm, dull, with upward-pointing epidermal teeth on margins, acute to obtuse at tip, midrib only conspicuous and slightly raised on lower surface. **Inflorescence:** spikelike, flowers 1 or rarely 2 per axil of a leafy bractlet, if 2 the older one next to stem, subsessile to sessile; bractlet subtending pedicel narrower than leaves; pedicel < 1 mm long; bracteoles 2, opposite at base of ovary, acuminate, 0.5–1 mm long, whitish. **Flower:** bisexual, radial, 5(–7) mm across, ± erect; not heterostylous; hypanthium at anthesis narrowly inversely conic or funnel-shaped, 3.5–4.5 mm long, becoming cylindric and increasing to 6 mm long in fruit, light green with 10 or 12 darker veins; **sepals** 5–6, erect or inward-pointing, deltate, < 0.5 mm, fused with 5–6 ascending or spreading appendages, the appendages acuminate, 1–1.3 mm long, green, with minute, upward-pointing epidermal teeth on margins; **petals** 5–6, narrowly oblanceolate to obovate, 2–3.5(–6) × 1–1.4 mm, pink to rose or lavender; **stamens** 5–6, free, attached to hypanthium at or below midpoint, at anthesis included but filaments elongating after pollen shed; filaments attached sometimes at different levels, 2–3 mm long, translucent; anthers dorsifixed, dithecal, ca. 0.3 × 0.3 mm, pale greenish yellow, longitudinally dehiscent; pollen light yellow; **pistil** 1, ± 3 mm long; ovary superior, sausage-shaped, green, glabrous, 2-chambered, each chamber with many ovules attached to center; style slender, 1–1.5 mm, included; stigma capitate, minutely papillate. **Fruit:** capsule, dehiscent by 2 toothlike valves from top, ± 28-seeded, torpedo-shaped, ± 4 mm long, dark reddish at tip, included within hypanthium. **Seed:** ± compressed-obovoid, 0.6–1 mm long, pointed at micropylar end, with an acute edge along top and sometimes extending basally, mottled brown. Late May–late July.

Naturalized. Annual known from several localities in the central SMM, e.g., SMMNRA Rocky Oaks, Arroyo Sequit, and Paramount Ranch, growing in wet situations. Flowers of *Lythrum hyssopifolium* are self-compatible and much smaller than those of the heterostylous, obligately outcrossing *L. californicum*.

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