

Asclepias L. MILKWEED

Asclepias fascicularis Decne., NARROW-LEAF MILKWEED. Perennial herb, \pm taprooted, 1–several-stemmed at base, commonly unbranched above, erect, 40–135 cm tall; shoots often with young leaves often tufted when formed on unexpanded axillary shoots (fasciculate); latex white, copious; perennial root and caudex ca. 120 mm belowground. **Stems:** cylindrical, to 7.5 mm diameter, green with linear, orangey fringe across node, tough, lower stem glabrous or glabrate, with short-villous hairs at nodes and in flowering canopy; old stem forming periderm and aging light brownish. **Leaves:** whorled with 3–4(–6) leaves and opposite, simple, short-petiolate, with hairlike “stipules”; stipules attached to stem, erect, slender with conic base, ca. 0.7 mm long, red, often with similar bodies in the axil attached to base of petiole; petiole channeled, < 8 mm long; blade narrowly lanceolate to lanceolate-linear, $80\text{--}170 \times 3\text{--}18$ mm, folded upward from midrib before expanding (also later during water stress), tapered at base, entire, acuminate at tip, pinnately veined with midrib sunken on upper surface and raised on lower surface, essentially glabrous or with some short hairs remaining along midrib. **Inflorescence:** umbel-like cyme, typically axillary and at the first flowering node 1 from each leaf axil (3–5 per node), hemispheric, 25–40 mm across, many-flowered, bracteate, soft-hairy; peduncle to 80×1.5 mm, flexuous, sparsely short-villous; bractlets subtending outer pedicels involucrelike, each linear-lanceolate, 0.4–4 mm long, the largest subtending the outermost pedicels; pedicel 9–15 mm long, flexuous, green or tinged rose to purple. **Flower:** bisexual, radial, 4.5–7 mm across; in bud short-villous (calyx) and glabrous (corolla); **calyx** deeply 5-lobed, at anthesis strongly reflexed, ascending and appressed in fruit; tube ± 0.4 mm long; lobes not overlapping, lanceolate, 2–2.5 mm long, glabrous on exposed surface; **corolla** deeply 5-lobed, on its tube bearing an upward column, greenish white or white; tube moundlike; lobes reflexed at anthesis, narrowly elliptic, $4\text{--}4.5 \text{ mm} \times 1.5\text{--}2$ mm, crescent-shaped at tip, exposed surface glabrous, often tinged purple; **stamens** 5, fused at base into filament column arising on corolla tube surrounding pistils + anthers fused to the enlarged stigmatic head (gynostegium), with elaborate appendages (a corona of hoods with horns); filament column ± 1.2 mm long, 5-ribbed; hoods 5, alternate with corolla lobes, erect, scoop-shaped, ± 1.5 mm long, greenish white with a faint purplish midstripe, producing nectar at base, the horn attached inside hood near base, linear-sicklelike, ± 2.2 mm long, white, exerted ca. 1 mm beyond hood and at anthesis \pm touching or overarching stigmatic head later drooping; anthers \pm triangular with a projecting, horny, slitted access to pollen, ca. $1.5 \text{ mm} \times 1.2$ mm, maroonish on central outer surface, winged at margin with wing the widest at base, tipped with a with \pm triangular flap, the flaps together totally covering top of stigma; pollen united into pollinia, each pollinium flattened and narrowly teardrop-shaped, 1 mm long, golden yellow, united by orangey translator arms to a central, deep purple gland; **pistils** essentially 2, together chalice-shaped, 3–3.5 mm long; ovaries superior, barely fused at base, ovoid but flattened on common side, ± 1.2 mm long, green, 1-chambered with many ovules attached on inner side; styles 2, straight to somewhat crooked, green at base becoming whitish and fused at stigma; stigma capitate, 1.2×1.5 mm (includes some styler tissue), the top flat, 5-lobed, white to rose-colored on upper edge, green on sides but purplish around side patches where pollinia attach. **Fruit:** follicles 1 (rarely 2, typically only 1 ovary matures), \pm erect on erect peduncle having

ascending to erect pedicels, narrowly lanceoloid to fusiform, to 75–120 × 7 mm, long-tapered at tip, with scattered short hairs, lower portion bulging from seed, from midpoint filled with long silky hairs. **Seed:** flattened hemi-ovoid with raised and flattened or concave sides, 5–6 × 2.5–3 mm, brown, with > 100 fine silken white hairs attached to straight edge, margin thin and often inrolled; hairs spreading, ca. 30 mm long. Late May–late September.

Native. Perennial herb occurring in native to disturbed grassland habitats throughout the range. *Asclepias fascicularis* has narrow, whorled leaves, and its shoots have relatively little pubescence and often appear glabrous. Within a population, on plants growing side by side, flowers can appear greenish, yellowish white, or tinged light purple-red. Many insects visit this species, but probably only certain species of wasps are capable of affecting pollination; through a slit on the central column, a leg of the wasp may grasp a saddlebaglike pair of pollinia to carry to another flower. At the next flower a pollinium must become attached to a receptive patch on the side of the stigmatic head. Only one ovary matures as a fruit, probably because only one of the two stigmatic patches is typically in contact with a pollinium. There are enough pollen grains in the pollinium to fertilize many seeds from that single pollination event.

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