

Plants of Williamson County
Sesbania vesicaria – BAGPOD [Fabaceae]

Sesbania vesicaria (Jacq.) Ell., BAGPOD. Woody annual, taprooted, not rosetted, with lateral primary branches at successive cauline nodes, erect and open, in range < 100–250+ cm tall; shoots with only cauline leaves widely spaced along straight axes, odorous when crushed, green organs initially villous to short-villous to appressed aging essentially glabrous, foliage the longest on primary axis to 290 mm long and oblong in outline with the largest and most leaflets and decreasing upward, glaucous. **Stems:** ± cylindric, to 15+ mm, tough, woody, internode long and along principal axis of young plant sometimes 140+ mm long, light yellow-green, initially villous and short-villous aging without hairs and woody. **Leaves:** helically alternate, even-1-pinnately compound with (4–)7–18(–20) pairs of opposite and subopposite leaflets (first leaf on seedling entire and obovate), petiolate, with stipules, leaf mostly > internode; stipules 2, attached to leaf base, long-acuminate, mostly 9–11 mm long, light yellow-green, flattish on lower (outfacing surface) and ribbed or winged on upper surface (not precisely midline), sparsely villous aging glabrescent, tardily abscising; petiole pulvinus conspicuous, to 11 × 4.5 mm (scaling with leaf size), above pulvinus often lacking an axis below the lowest leaflet (a short axis to 2 mm long in the largest leaves), rachis with a narrow and raised shallow channel, pairs of leaves arising on upper side of rachis spaced to 22 mm apart decreasing upward along rachis to > 8 mm apart, initially villous aging without hairs, extrafloral nectaries not observed; petiolules = cylindric pulvinus somewhat ascending, 1–2.5 mm long, light yellow-green; blades elliptic or oblong to ovate, 11–30 × 4.5–13 mm, nearly rounded at base, entire, rounded to subtruncate with distinct, narrowly folded and curved at tip, pinnately veined with midrib slightly raised on lower surface, initially short-villous but lacking hairs at maturity, glaucous especially on lower surface and sometimes bluish (e.g, the largest leaves). **Inflorescence:** raceme or with shorter secondary raceme later arising at base, axillary often from each canopy node, ascending to spreading later drooping with fruits, several-flowered with flowers limited to terminal portion, bracteate, initially villous and short-villous later glabrescent or appearing glabrous; peduncle straight, cylindric (lacking a pulvinus), peduncle + rachis to 120 mm long and ± = subtending leaf, rachis with persistent projecting bases of bractlets; bractlet subtending pedicel awl-shaped, 4–5 mm long, light green, short-villous, abscised in early bud; pedicel ascending with flower drooping at end, cylindric, to 10 mm long increasing in fruit, with a subopposite pair of bracteoles approaching and appressed to flower bud, bracteoles awl-shaped, 3.5–4 mm long, abscised in large bud, leaving a projecting base on pedicel. **Flower:** bisexual, bilateral, pealike (papilionaceous), ca. 10 mm across and 10 mm long; **nectary** thickened receptacle below ovary, green; **calyx** 5-lobed, 5-5.5 mm long, sparsely short-villous; tube wide funnel-shaped and oblique, 3–4 mm long (each flower) and 3 mm wide, green or tinged reddish; lobes unequal with the longest on lower side (opposite keel), triangular or deltate, 1–1.5 mm long, with wide, rounded sinuses; **petals** 5, clawed; banner elevated not strongly reflexed or curved, claw ca. 3 mm long flared at top to 1 mm wide, whitish, limb 2-lobed with notch at top and widely rounded lobe bases, ca. 5–7 × 9.5–10 mm, in range blotch center at base mostly yellow (greenish with dimple on lower surface) and outward light crimson to orange and yellow or yellow-orange approaching margins, with fine, radiating

nectar guides from edges of yellow blotch, glabrous; wings 2, claws $3-3.5 \times 0.5$ mm, whitish aging papery, limbs wide-oblong, ca. $6-7 \times 2.7-2.9$ mm, in range rose-red or blushed orangish, with fine radiating veins from claw, rounded to subtruncate at tips, basal lobe poorly developed, acute, to 0.3 mm long; keel of 2 petals fused along lower margins of limb but not strongly keeled, claw $3-3.5 \times 0.4$ mm, whitish aging papery, limbs fused from above claws to elevated tips, purselike with broad edge and flat sides, rose-red with fine veins. **stamens** 10, diadelphous (9 filaments fused and 1 free); filament sheet ca. 6 mm long, greenish aging whitish, slightly ribbed, free portions within 1 flower short 1 mm long alternating with longer 2 mm long and threadlike at top approaching anthers; anthers dorsifixed, dithecal, ca. 0.7 mm long (short filaments) and ca. 0.9 mm long (longer filaments), cream-colored aging yellow and rose-red, longitudinally dehiscent; pollen cream-colored; **pistil** 1, 9–10 mm long, stalked (stipe), stipe at anthesis ca. 1 mm long; ovary superior, linear narrowed at base and tip flattened side-to-side, at anthesis ca. 5×1 mm, green, appearing glabrous, 1-chambered with 2 ovules in central region of ovary; style straight and green in staminal column and at top of column bent sharply outward with recurved (backward-facing) stigma, 3–3.5 mm long, light green; stigma terminal, appearing truncate (indented). **Fruit:** pod (legume), stalked and pendent, dehiscent along 1 suture, (1–)2-seeded in detachable, papery sack (inner fruit wall, endocarp), \pm narrowly elliptic and biconvex usually with prominent beak (persistent style), (one-seeded, 25–)45–80 \times 13–18 mm including slender beak, dark brown, valves tough and widespreading thereby releasing inflated, fusiform sack sealed along 2 edges, sack whitish, papery, and opaque and bulging and inflated (breaking open) at seeds, as long as fruit body tapered at both tips; beak mostly 6–10 mm long, partially splitting with valves but still attached at tip; stalk below ovary (above calyx) ca. 10 mm long also splitting open. **Seed:** oblong to kidney-shaped, ca. $10-11 \times 4-6.2 \times 4-5.2$ mm, brown to darker brown subtly mottled with muted black spots, lighter brown around hilum, seed coat hard; hilum elliptic, ca. 4.5×1.5 mm, dark brown.

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