

Vascular Plants of Williamson County

Clematis drummondii – TEXAS VIRGIN'S BOWER, LOVE-IN-THE-MIST [Ranunculaceae]

Clematis drummondii Torrey & A. Gray, TEXAS VIRGIN'S BOWER, LOVE-IN-THE-MIST. Perennial climber, fall-deciduous and dieback, twining by leaf axes (petioles and petiolules), supporter especially on property fences along roadsides in full sun; dioecious; shoots with only cauline leaves, short-hairy. **Stems:** ridged, young stems typically 6-ridged and 6-sided with rounded ridges aging cylindrical, to 3 mm diameter, tough, flaring at nodes with petioles fused, internodes long, < 80–150 mm long, \pm flexible, with crooked colorless hairs to 0.7 mm long mixed with scattered, minute glandular hairs. **Leaves:** opposite decussate, variable to 150 mm long, 2–3 \times pinnately-3-foliolate with palmately lobed ultimate segments, 3-forked at each, primary leaflets arising to upper side, without stipules; petiole widely flared where fused at base and channeled approaching base, often twisted, slender and angled, < 20–70 mm long, tough, green, soft short-hairy, 3-forked at top; rachis, primary petiolules, and secondary petiolules channeled, rachis to 40 mm long, sometimes 3-forked at top; paired lateral petiolules to 15 mm long, central petiolules to 30 mm long, not straight, soft short-hairy, upper side often reddish; blades ovate in outline and palmately-pinnately 3-lobed and symmetric to 2-lobed mitten-shaped, central lobe from midblade defined by narrow sinuses, basal pair of lobes each with 1–3(–5) acute sublobes and teeth, to 50 \times 45 mm, lateral lobes to 15 mm long, central lobe to 30 mm long, palmately 3-veined at basal and pinnate principal veins slightly sunken on upper surface and raised on lower surface, soft short-hairy or villous on lower surface. **Inflorescences:** mostly 3-flowered cyme, on axillary shoot with a pair of simple leaves (bracts) and a pair of lateral branches each with a flower; principal bracts (first node) ovate mostly with a pair of short lateral lobes at midblade, to 8 \times 6.5–7 mm; bractlets subtending lateral flowers unlobed and obovate to elliptic, 2–5 \times 1–2 mm, pedicel several ridged, of staminate flowers to 25 mm long, tough, expanded approaching tip, short-hairy. **Staminate flower:** radial, \pm 25 mm across, **nectaries** absent; receptacle hemispheroid, \pm 0.6 \times 1.2 mm, green, with ovaries sunken and surrounded by prominent ridges, glabrescent but occasional short hairs along ridges; **sepals** 4 in 1 whorl, widely spreading rotate), free but in bud appearing fused but held together by tangled hairs, obovate to oblong, mostly 9–14 \times 5.5–7 mm, cream-colored but lower surface often blushed purplish red above midpoint, 7-veined at base, margins often flexed downward, pubescent with lower surface short-tomentose, upper surface initially short-hairy with appressed hairs, and margins densely matted with cream-colored tomentose hairs and especially conspicuous approaching tips; sepals margins sometimes flexed; **petals** absent; **stamens** 40–90, helically alternate, free, radiating from receptacle; filaments linear and flattened front-to-back, < 7–11 mm long, outer series white and inner series of younger stamens greenish; anthers basifixed, dithecal, 1.2–1.4 mm long, cream-colored to red, longitudinally dehiscent; pollen white; pistils absent (no pistillodes). **Pistillate flower:** radial, \pm 25 mm across, **nectaries** absent; receptacle hemispheroid, \pm 1 \times 2 mm, green, with ovaries sunken and surrounded by prominent ridges, glabrescent but occasional short hairs along ridges; **sepals** 4 in 1 whorl, widely spreading (rotate), free but in bud appearing fused but held together by tangled hairs, obovate to oblong, mostly 9–14 \times 3.5–7 mm, cream-colored but lower surface often blushed purplish red above midpoint, 7-veined at base, margins often flexed downward,

pubescent with lower surface short-tomentose, upper surface initially short-hairy with appressed hairs, and margins densely matted with cream-colored tomentose hairs and especially conspicuous approaching tips, sepals margins sometimes flexed; **petals** absent; **stamens** = staminodes, helically alternate, 17–39 in (1–)2 series, mostly $6.5\text{--}7 \times 0.4\text{--}0.6$ mm but the outermost staminodes to 11 mm long, filaments white at base and light yellow-green above aging white and inner filaments green, sterile anthers basifixed, whitish, ca. 1 mm long; **pistils** 35–90, helically alternate; ovaries superior, ascending to suberect, subtruncate, 0.5×0.5 mm, light yellow-green, at anthesis short-hairy, 1-chambered with 1 ovule; style appressed, in range 25–150 mm long, at base 0.15– 0.2 mm diameter, light yellow-green aging purple-red drying brown, at anthesis short-hairy with appressed straight hairs against style axis, exposed 1 mm tip lacking hairs and papillate on inner side. **Fruits:** achenes, to 90 per pistillate flower, helically arranged, formed like a head on the hemispheroid receptacle, conspicuously feathery, each achene having a persistent, feathery style (plumose beak); achene body asymmetrically obovoid compressed side-to-side and flattish to convex on faces, $2.6\text{--}4.2 \times 1.4\text{--}2.2 \times 0.7\text{--}0.9$ mm, brown, densely short-villous; beak ascending to suberect and curved to somewhat coiled, 25–90+ mm long, densely plumose with stiff straight hairs short–2 mm long; receptacle pitted, appearing honeycombed with ridges between fruits, short-hairy along ridges.

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