

Vascular Plants of Williamson County

Galactia regularis – DOWNY MILKPEA [Fabaceae]

Galactia regularis (L.) Britt., Stearns, & Poggenb., DOWNY MILKPEA. Perennial vine, twining, taprooted with slender, branched caudex, not rosetted, several-stemmed at base, trailing over ground and neighboring vegetation; shoots with only cauline leaves, foliage on long, flexible branches having internode > leaf, suedelike with soft hairs on all structures. **Stems:** cylindrical, to 2 mm diameter, tough, internodes to 85 mm long, soft short-hairy, aging purplish red on lower stems. **Leaves:** helically alternate, pinnately 3-foliolate, petiolate with pulvinus, with stipules; stipules 2, on swelling below pulvinus, acuminate, 1–2.4 mm long, green often aging red, short-hairy; petiole pulvinus 2–2.5 mm long, green, above pulvinus shallowly channeled, to 25 mm long, tough, green, short-hairy, lacking gland at top; rachis not channeled, to 8 mm long; stipel subtending petiolule on upper side 1 and 2 (terminal leaflet), fingerlike, 0.3–0.5 mm, green, short-hairy; petiolule pulvinus 1.5–1.8 mm long, short-hairy; blades of leaflets broadly elliptic to roundish ovate, 17–50 × 9–34 mm, terminal > lateral, subcordate at base, entire, short-notched with short point (extension of midrib) at tip, pinnately veined with principal veins somewhat raised on lower surface, upper surface short-villous, lower surface paler, short-villous and villous with long hairs to 0.8 mm long and somewhat appressed. **Inflorescence:** racemes, axillary, 2–several of different ages, the initial raceme ascending or widely spreading, to 140 mm long and > leaf, especially lower nodes with 2–3 flowers of different ages, often just 1 flower open on raceme per day, bracteate, soft short-hairy; peduncle pulvinus ca. 1 mm long axis above pulvinus cylindrical, green, with the lowest node to 65 mm, short-hairy with downward-pointing hairs; bractlet subtending pedicel triangular, 1 mm long; pedicel cylindrical, 2–3.5 mm long not increasing in fruit, green, short-hairy, with a pair of opposite bracteoles at top, bracteole ovate, 1 mm long, green, raised on midvein, short-hairy. **Flower:** bisexual, bilateral, pealike (papilionaceous), ca. 4 mm across; receptacle producing nectar surrounding pistil; **calyx** 4-lobed, ca. 5.5 mm long, green, soft short-hairy on outer surface; tube funnel-shaped, ca. 2.5 mm long; lobes unequal, upper lobe triangular-ovate, ca. 3 × 1.5 mm, pinched at tip, lateral 1 lobes triangular, ca. 2.5 × 1 mm, half next to keel lacking hairs, lower lobe triangular, ca. 3 × 1 mm, rounded on back, inner surface of lobes with appressed minute hairs; **petals** 5, ± 8 mm long, clawed; banner claw wedge-shaped, 1 × 0.7 mm, reddish, limb obovate, ± 7 × 4 mm, pink and light pink-purple, truncate at base; wings 2, claws slender, ca. 2.2 mm long, white, limbs obovate, 5.5–6 × 2 mm, light pink-purple with minute purple-red dots, having white, backward-pointing basal lobe; keels of 2 petals partially fused from limb midpoint on lower edge to near tip, claws slender, ca. 2 mm long, white, limbs hatchet-shaped, white to midpoint to light pink-purple at tip; **stamens** 10, diadelphous (9 fused and 1 free), included in keel; filament sheet ca. 4.5 mm long, white, free portions alternating 2 and 2.5 mm long, white; anthers dorsifixed, dithecal, 0.6–0.65 mm long, light yellow, longitudinally dehiscent; pollen pale light yellow; **pistil** 1, 7.5–8 mm long, included in keel; ovary superior, oblanceolate-linear flattened side-to-side, ca. 4 × 0.5 mm, green, densely covered with soft, straight, upward-pointing short-hairs, 1-chambered with to 7 ovules attached to upper side; style shallowly curved upward, light green, with minute terminal stigma. **Fruit:** pod (legume), dehiscent by 2 valves, in range mostly 3–5-seeded, ± cylindrical and straight slightly bulging at seeds,

in range 22–36 × 4–5.2 mm, short-hairy with hairs of various lengths. **Seed:** broadly ellipsoid to somewhat kidney-shaped, 3–3.6 × 2.3–2.7 mm, mottled dark brown and light brown, solid dark brown around median hilum, seed coat hard and smooth.

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