Vascular Plants of Williamson County

Dalea aurea – GOLDEN DALEA, PUSSY-FOOT DALEA [Fabaceae]

Dalea aurea Nutt., GOLDEN DALEA, PUSSY-FOOT DALEA. Perennial herb, woody taprooted, not rosetted, several-many-stemmed at base, principal springtime branches spreading with terminal inflorescence, in range to 40 cm tall; shoots with only cauline leaves, on flowering axis with long internodes and unexpanded axillary shoots so appearing leafless above midplant, strigose and short-strigose with upward-pointing hairs, inconspicuously glanddotted. **Stems:** initially low-ridged, to 2 mm diameter (aboveground), with 3 ridges descending from each leaf, light yellow-green, tough, flexible, internodes to 25 mm long, short-strigose. **Leaves:** helically alternate, pinnately-odd-(1-2-)3- or 5(7)-foliolate with lateral leaflets in pairs, petiolate with pulvinus, with stipules; stipules 2, attached at base of pulvinus, acuminate and winglike, \pm 1.5 mm long, short-hairy often short-strigose, often red at tip; petiole pulvinus 1 mm long, inconspicuous or enlarged and pale green, above pulvinus somewhat slender and flat to faintly channeled on upper side, 2.5–13 mm long, strigose with upward-pointing hairs, gland-dotted on lower side; rachis faintly channeled, axis between pairs of leaflets 2–7 mm long, strigose, gland-dotted on lower side; petiolules pulvinus with constriction at base, 0.3–0.8 mm, white to pale green, with strigose hairs; blades of leaflets obovate or oblanceolate to oblong, $1.3-14 \times 0.8-4.5$ mm, terminal > lateral leaflets, folded upward from midrib, tapered at base, entire, obtuse to rounded at tip, with only midrib visible, strigose with long hairs, glands inconspicuous on lower surface. **Inflorescence:** headlike spike, terminal, conic in fruit \pm cylindric, in fruit to $60 \times 11-13.5$ mm, flowers helically alternate (3/8 phyllotaxy) and tightly packed, bracteate, on head densely white villous; peduncle stemlike, here treated as short above the uppermost cauline leaf, if treated as long then ridged and = to 300 mm long with diminutive 1–2-foliolate leaves on a strigose axis with 3 ridges descending from bractlets and having strigose upward-pointing hairs; bract subtending spike absent, at base with 1–2 bractlets lacking flower; rachis densely villous between tightly packed flowers; bractlet subtending flower cupped, the lowest series keeled-ovate, others oboyate rounded on back, $3-5.5 \times 1.6-2.5$ mm, cream-colored with red point at tip, outer (lower) surface densely white villous with hairs 1–1.5+ mm long, inner (upper) surface glabrous, persistent. **Flower:** bisexual, bilateral, pealike (papilionaceous), 2–3 mm across (= calyx; corolla folded together), 10–12 mm long; receptacle lacking obvious nectary; **calvx** 5-lobed, 6.5–7 mm long not increasing in fruit, densely white-villous (hirsute) with hairs to 1.2 mm long; tube funnelshaped, to midpoint, whitish but cream-colored approaching lobes and greenish veins, 10veined, inner surface glabrous and gland-dotted with to 15 scattered glands; lobes subequal, acuminate with stiff short point at tip, ca. 4×1 mm, yellowish with red tip, densely villous on both surfaces; **petals** 5, 4 attached to filament sheet, clawed; banner arising from receptacle, claw cupped, 3–3.5 mm long, pale green aging greenish white with membranous margins or colorless, limb strongly folded, inverted heart-shaped to deltate, ca. $3 \times 3.5-4$ mm, bright yellow, minutely gland-dotted on lower surface near claw, tip ca. 5.5 mm from base of flower; wings 2, attached on filament sheet ca. 2.5 from base, claws flat, 1 mm long, in bud pale green aging white, limbs appressed to keel, ovate truncate at base, $3-5 \times 1.5-2.5$ mm, bright yellow; keel of 2 petals partially fused on lower edge of limbs from midpoint to near tip, arising on filament sheet 1 mm above wings, claws flat,

1–2 mm long, colorless tissue with yellow veins, limbs somewhat hatchet-shaped with basal, backward-pointing lobe 0.5 mm long, $4.5-6 \times 2-2.5$ mm, bright yellow, not glanddotted; stamens 10, fused as cupped sheet; filament sheet ca. 8 mm long having free portion of 5 short filaments alternating with 5 longer filaments, 1–2.2 mm long (short filaments) and 2–3.2 mm long (long filaments), in bud pale yellow-green aging colorless; anthers 0.6–0.65 mm long (short filaments) and 0.8–0.85 mm (long filaments), orangeyellow or light yellow with reddish edge, longitudinally dehiscent; pollen orange-yellow; pistil 1, 10.5–12 mm long, in bud tip of curved style adjacent anthers; ovary superior, fusiform compressed side-to-side, $1.5-2 \times 1$ mm, green or with patch of white near base, glands obscure, long-villous above midpoint, 1-chambered with 1 ovule; style cylindric, pale green and exserted portion light yellow, sparsely villous on lower side to midpoint and strongly curved upward above midpoint, with minute terminal stigma. Fruit: pod (legume), abscised with calyx, indehiscent, 1-seeded, kidney-shaped to hatchet-shaped, ca. $4 \times 2 \text{ mm} + \text{beak (style)}$ to 1.5 mm long, glabrous at base but mostly densely villous. **Seed:** somewhat kidney-shaped, ca. $2 \times 1.8 \times 1$ mm, olive to brown, smooth. A. C. Gibson