Vascular Plants of Williamson County

Psoralidium tenuiflorum – WEDGELEAF SCURFPEA, WILD ALFALFA, SLIM-LEAF SCURFPEA [Fabaceae]

Psoralidium tenuiflorum (Pursh) Rydb., WEDGELEAF SCURFPEA, WILD ALFALFA, SLIM-LEAF SCURFPEA. Perennial herb, several-stemmed at base, branches in canopy repeatedly forked often with an axillary shoot developing and diverging from each node, with hemispheroid canopy, in range to 90 cm tall; shoots with only cauline leaves, short-strigose with upwardpointing hairs and conspicuously gland-dotted having internal, spheric glands, somewhat odorous when crushed. **Stems:** ridged, to 3 mm diameter, young stems < 1 mm diameter, with 3 ridges descending from each leaf, tough and when young somewhat wiry, in canopy zigzagged, densely short strigose-canescent, glands in tissue between ridges inconspicuous. Leaves: helically alternate, odd-palmately 3(5)-compound, short-petiolate with pulvinus, with stipules; stipules 2, attached to stem at node, \pm lanceolate to narrowly triangular, ca. 1.5 mm long, gland-dotted (red-purple spots) and yellowish at tip, somewhat fleshy, shorthairy, persistent; petiole pulvinus ca. 1 mm long, whitish, not enlarged, short-hairy, above pulvinus cylindric, < 4 mm long, densely short-hairy having glands concealed by hairs; petiolules 0.5–0.8 mm long, whitish, densely short-hairy; blades of leatlets often folded upward along midrib, elliptic to lanceolate or oblanceolate to obovate, $10-17 \times 4-8.5$ mm, central leaflet > lateral leaflets, tapered at base, entire, acute to truncate or rounded with short, stiff point extending from midrib at tip, pinnately veined with midrib raised on lower surface, upper surface with fine network of minor veins and conspicuously sunken glands (visible when backlighted), with short hairs along midrib aging glabrescent, lower surface short-strigose and hirsute with glands concealed by hairs, each margin with a dense line of internal glands. Inflorescence: raceme, axillary, canopy with distinctive zigzagged principal axes, raceme diverging from stem at 45° , < 10-flowered, (1-)2(-3)-flowered cluster per node, internodes unequal, bracteate, hairy; peduncle ridged, slender, at anthesis 25–36 mm long, >> leaf, green, without obvious glands; rachis ridged, ridges descending from bracts, internodes < 3-12 mm long on each raceme; bract subtending cluster cuppedovate and partially sheathing, 1.2-1.9 mm long, acuminate at tip, gland-dotted and shorthairy, persistent and aging red; bractlet subtending pedicel linear and hairlike, to 0.6 mm long at anthesis or just after flowering, scarious and abscising; pedicel at anthesis 1-1.4mm long increasing $3 \times$ in fruit, purple without glands, densely short-hairy (canescent), abscising at base if without fruit. Flower: bisexual, bilateral, pealike (papilionaceous), ca. 2.5-3 mm wide; calvx 2-lipped, 4-lobed, 3.5-4 mm long, red-purple densely spotted with conspicuous glands, on outer surface villous having hairs to 1 mm long (ciliate); tube funnel-shaped, ca. 1 mm long increasing in fruit; lower lip unlobed, cupped-lanceolate and curved upward, ca. 2 mm long increasing in fruit, inner surface with some short hairs; upper lip 3-lobed, lobes triangular ca. 1 mm long (lateral lobes) and 1.5 mm long (central lobe), inner surface with short hairs: **petals** 5, 3.6–4 mm long, clawed: banner folded over wings, claw ca. 1 mm long and tapered to base, whitish at base to light purple above midpoint, limb rounded, $3-3.5 \times 3-3.5$ mm, light purple with conspicuous, darker veins on outer (lower) surface, having a pair of crescent-shaped flaps at top of claw, slightly notched at tip; wings 2, not fused at tips, forward-pointing, $\pm =$ banner, claw linear, ca. 1.3 mm long, white, limb obovate, $1.8-2.5 \times 1.2$ mm, limb deep purple and having back-pointing

pinkish purple lobe 0.6–0.7 mm long adherent to keel limbs; keel of 2 petals, clawed, with limbs fused on lower side base-to-tip, claws linear, ca. 1.3 mm long, white, keel < wings, limbs = claws, hatchet-shaped, purple having narrow white margins and without obvious veins, glabrous; stamens 10, diadelphous (9 fused + 1 free), ca.2.5 mm long but free stamen shorter; filaments fused nearly to top, sheet ca. 1.3 mm long, with bulging ovary to midpoint, free portions alternately short and longer appearing like flattened lobes 0.15-0.4 mm long, white or aging pale green, filament of free stamen S-shaped, threadlike; anthers dorsifixed, dithecal, ca. 0.2–0.25 mm long, pale light yellow, longitudinally dehiscent; pollen white, sticky; nectary chamber beneath ovary inconspicuous; pistil 1, < 3 mm long, short-stalked (stipe); ovary superior, ellipsoid compressed side-to-side, 0.7 mm long, glossy green, 1-chambered with 1 ovule attached to upper side, glands inconspicuous; style straight from base and 0.4 mm diameter sharply bent upward ca. 0.5 mm from end (3 mm long if straightened), white or aging pale green; stigma terminal, capitate, exserted just above level of the longest stamens, with domed cells. Fruit: pod (legume), dispersed with calvx and pedicel, indehiscent, 1-seeded (tight-fitting within fruit), plump ovoid, $6.5-7 \times$ 3–3.5 mm, light brown pocked with conspicuous, dark brown glands, top triangular above seed with smaller, sunken glands, glabrous; calyx and pedicel stiff short-hairy, pedicel ca. 4 mm long. Seed: \pm ellipsoid (kidney-shaped), $4.5-5 \times 2.6-3 \times 2$ mm, dull dark green, hard, with hilum somewhat off-center. A. C. Gibson