Vascular Plants of Williamson County Scutellaria wrightii – WRIGHT SKULLCAP [Lamiaceae]

Scutellaria wrightii A. Gray, WRIGHT SKULLCAP. Perennial herb, taprooted, several-many-stemmed at base, not rosetted, principal shoots ascending, 10–20 cm tall; shoots with only cauline leaves, axes and foliage densely short-hairy (puberulent) and with sessile glandular hairs having translucent-whitish heads. Stems: 4-sided, ca. 1 mm diameter, tough, green with occasional red-purple spots, internodes to 18 mm long, having a pair of horizontal ledges at each node, with dense nonglandular hairs arching downward and on faces with sessile glandular hairs. Leaves: opposite decussate, simple, shortpetiolate (indistinct from blade) having a pair of ledges across node, without stipules; petiole < 1-3 mm long (appearing longer), light green, with midvein raised on lower side, short-hairy and with sessile glandular hairs; blade appearing ovate to elliptic, $6-13+\times$ 4-6.5+ mm, narrowly tapered at base (indistinct from petiole) and above broadly tapered, entire, rounded (obtuse) at tip, pinnately veined with midrib sunken on upper surface and principal veins raised on lower surface, surfaces uniformly pubescent. Inflorescence: leafy raceme with a pair of flowers per node (= opposite axillary flowers), flowers horizontally oriented predominantly to 1 side of raceme, bracteate, with hairs as on shoot; bractlet subtending pedicel leaflike and sessile; pedicel ascending, 3–3.5 mm long, green and reddish (exposed side), < 1 mm from base having a pair of bracteoles, the bracteoles \pm linear, 0.4–0.6 mm long, light green, puberulent. Flower: bisexual, bilateral, 10–12 mm across; calvx shallowly 2-lipped, at anthesis 3-3.4 mm long, consisting of a tube, 2 equal lips, and a projection (scutellum or "appendage") on the upper side (visorlike, a flattened sac) arising from the tube initially ca. 2.2×3.2 mm increasing in fruit, outer surface puberulent and with sessile glandular hairs having translucent heads, inner surface glabrous; tube bell-shaped, not compressed, green on lower side and often purple-red on upper side, having a principal vein to each sinus and 3 fine veins to lip margin on lower side, lip ca. 3 mm across; projection above midpoint and cupped backward; lips rounded, 0.5–0.7 mm long, mostly red-purple, entire; corolla 2-lipped, mostly 13–18 mm long, outer surface short-villous and with sessile glandular hairs; tube cylindric curved upward, $6-7 \times 1.8-2$ mm, whitish at base to pale violet above, inner surface densely villous concealing nectar and ovary; throat funnel-shaped somewhat inflated, ca. 6×6 mm, outer surface pale to light or dark violet including many nonglandular hairs and having ca. 7 raised veins, on inner surface floor with 3 darker, solid violet lines to white approaching lower limb; upper lip hoodlike (galea) flanked by a pair of lateral lobes, mostly dark violet (light violet), ca. 6 mm long, lateral lobes rounded (obtuse), $3-3.5 \times 2.5$ mm, nonglandular hairs mostly violet; lower lip 3-lobed, $6-6.5 \times ca. 10$ mm, glabrous on upper surface, lobes spreading to descending from floor and shallowly crenate, violet, approaching central lobe floor raised and white with central fold violet and having several violet spots on the white, central lobe ca. 2.5×6 mm slightly notched on margin center, lateral lobes somewhat earshaped, ca. 2×3.5 mm; stamens 4 in 2 pairs, arising above corolla tube, outer pair (lower stamens) arising ca. 6 mm from base of corolla, inner pair (upper stamens) decurrent on corolla and free above midpoint; filaments of lower stamens somewhat exposed, ca. 9 mm long, translucent becoming light violet approaching top, of upper stamens ca. 4 mm long and concealed in corolla hood, hooked displaying anthers downward, unevenly villous;

anthers not exceeding hood, dorsifixed, apparently dithecal, sacs unequal, of upper stamens anthers conspicuously dithecal with sacs on an anther circular in outline and 0.6 mm and 0.8 mm, of lower stamens having 1 sac diminutive and presumably sterile, white, longitudinally dehiscent with white to pale violet short-pilose hairy along dehiscent margins, before dehiscing with sessile glandular hairs on faces; pollen white; nectary disc on platform beneath ovary, incomplete, formed on low (abaxial) side appearing like a fifth ovary lobe, ca. 1 mm wide, whitish; pistil 1, included, stalked (stipe), the stalk 0.5 mm long, green, and surrounded by ovary; ovary superior, deeply 4-lobed, lobes obovoid, ± 0.3 mm long, pale green, rounded at top, 2-chambered, each chamber with 2 ovules; style attached at base of ovary between lobes (gynobasic), ca. 17 mm long, translucent and slender at base gradually thicker and light violet approaching tip curved downward, nested in hood with upper stamens, easily detached, stigma inconspicuously forked with larger terminal lobe. Fruits: nutlets, to 4, radiating on stalk ca. 1 mm long, enclosed in calyx with prominent projection, \pm 3-sided rounded on back, $1-1.4 \times 0.8-1.1$ mm, dull dark brown, often with dimple on 2 lateral faces, textured with minute warts (verrucose). A. C. Gibson