Vascular Plants of Williamson County Buglossoides arvensis – FIELD BUGLOSS [Boraginaceae]

Buglossoides arvensis (L.) I. M. Johnst., FIELD BUGLOSS. Annual, taprooted, not rosetted, initially 1-3-stemmed at base, erect, in range mostly to 45 cm tall; shoots with cauline leaves and leaflike bractlets, conspicuously short-hispid and short-strigose with upwardpointing hairs having bulbous bases (pustulate). **Stems:** cylindric, in range < 3 mm diameter, initially with 2 low ridges descending from each cauline leaf, often purple to purplish red, conspicuously short-strigose lacking scattered, erect, long stiff hairs. Leaves: helically alternate (opposite decussate at the lowest 2 nodes above cotyledons), simple, petiolate (the lowest leaves) and sessile, without stipules; petiole of the lowest leaves to 5 mm long, indistinct from blade; blade oblanceolate or narrowly oblanceolate to oblong and lanceolate-oblong, in range $13-93 \times 3-12$ mm, dull dark green, tapered at base, entire with margins inrolled (blade appearing more narrow), acute with a callus tip, midrib only visible and conspicuously sunken on upper surface and raised on lower surface, upper surface short-hispid with ascending hairs, lower surface short-strigose or short-hispid. Inflorescence: leafy cyme, terminal on main and lateral stems, several-flowered, lossely flowered and not 1-sided, buds and open flowers never coiled at tip, flowers at anthesis subsessile, with alternate leafy bractlets, short-strigose and short-hispid; bractlet subtending inflorescence = cauline leaf, oblong to narrowly lanceolate to acute-linear, 6-7 \times 0.5–0.7 mm, hispid-strigose with bulbous bases, hairs to 1 mm long and pointing upward; peduncle cylindric, densely short-strigose. **Flower:** bisexual, \pm radial, 3–5 mm across; calyx 5-lobed, at anthesis with erect to ascending lobes becoming ascending to spreading in fruit, hispid and strigose with upward-pointing stiff hairs; tube cup-shaped, ca. 0.5 mm long increasing $2 \times$ in fruit; lobes conspicuously unequal, narrowly lanceolate to triangular-linear, $3.5-5.5 \times 0.4-0.6$ mm increasing 2× in fruit, acute at tip, 1-veined with midvein sunken on upper surface and raised on lower surface, inner surface soft shortstrigose base-to-tip; **corolla** 5-lobed, trumpet-shaped (salverform), tubular portion > calyx, visible portion white, outer surface strigose, in bud slightly bulging and yellowish on throat opposite calvx lobes; tube flared around ovary, to 1 mm long and wide, white; throat $4-5 \times$ 1 mm, lower throat purple and 1 mm long, midthroat vellowish, upper throat pure white, lacking appendages, lining of midthroat with 5 glutinous, puberulent vertical strips of whitish papillate hairs and stalked glandular hairs; lobes rounded, 1.1–1.3 mm long, overlapping at margins, sometimes upper surface with several appressed hairs; stamens 5, fused to corolla tube ca. 0.5 above base and at purple-red zone, included; filaments 0.2-0.3 mm long, whitish; anthers dorsifixed, dithecal, 1.1–1.3 mm long, pale yellow often with colorless tip, longitudinally dehiscent; pollen whitish; nectary disc beneath ovary inconspicuous; **pistil** 1; ovary superior, deeply 4-lobed, lobes 3-sided ovoid, $0.5-0.6 \times$ 0.5–0.6 mm, green, rounded on back, glabrous and minutely bumpy at anthesis; style included, arising from center of ovary lobes, 1–1.6 mm long, translucent to pale green, glabrous; stigma capitate, with 2 lateral and 2 terminal lobes, white. Fruits: nutlets, typically 3–4, erect, triangular-ovoid, $2.5-2.8 \times 1.7-1.9$ mm, brown, lateral angles acute, outer face minutely bumpy (tuberculate) and with poorly defined short ridges, inner face keeled with groove \pm closed; style ca. 1 mm long. A. C. Gibson