

Vascular Plants of Williamson County

Verbascum thapsus – COMMON MULLEIN, FLANNEL PLANT [Scrophulariaceae]

Verbascum thapsus L., COMMON MULLEIN, FLANNEL PLANT. Biennial herb (sometimes with additional flowers in year 3 on old inflorescence), thick-taprooted, strongly and continuously rosetted, 1-stemmed at base, branching only in flowering canopy (or when principal shoot injured), with complete inflorescence erect to suberect, 60–220 cm tall; shoots in year 1 rosetted with many basal leaves, in year 2 after bolting with widely spreading, large basal leaves and overlapping set of ascending cauline leaves with winged decurrent bases, foliage tough, light yellowish green to grayish green, velveteen with a thick, dense cover of stellate and treelike (dendritic) hairs. **Stem:** thick, lower portion hidden by basal and cauline leaves, to 22 mm diameter, in year axis with exposed internodes with lower leaves maturing as cauline leaves, with a pair of bladelike wings decurrent from each leaf base, tomentum pale tannish; axis aging woody, with wide, solid, white pith. **Leaves:** helically alternate, simple, petiolate (basal leaves of year 1) and sessile, without stipules; petiole hemi-cylindric somewhat winged, to 40 mm long but indistinct from blade, to 12 mm across, often with 1 or a pair of basal lobes next to node, densely tomentose; blade obovate to narrowly obovate or broadly oblanceolate (lower leaves) $< 70\text{--}380 \times < 40\text{--}120+$ mm, upper 10–12 cauline leaves ovate decreasing to 50×30 mm, on new plant the first leaf obovate, $< 35 \times 20$ mm, long-tapered to tapered approaching base but often having acute, backward-pointing basal lobes to 40 mm long, entire to subentire with inconspicuous notches or low-crenate and often wavy on margins, broadly acute at tip, pinnately veined with principal and some minor veins strongly raised on lower surface, upper surface with channeled (concave) midrib with minor veins sunken on upper surface and principal and some minor veins raised on lower surface.

Inflorescence: spikelike, terminal, initially unbranched or later paniclelike with to 9 principal branches (+ minor branches), each branch of tightly crowded subsessile lateral cymes, $120\text{--}700 \times 20\text{--}35$ mm, many-flowered, bracteate, densely hairy with stellate and dendritic hairs; rachis thick and stiff, not visible; bractlet subtending flower narrowly lanceolate, to 8×1.3 mm, mostly greenish and densely covered with hairs. **Flower:** bisexual, bilateral, 18–24 mm across; **calyx** deeply 5-lobed, unequal lobes fused at base, pale green; tube thick, glossy, glabrous; lobes lanceolate-ovate to triangular, 1.5–5 mm long, 3-veined, rounded on back below midpoint, densely pubescent with stellate and dendritic hairs; **corolla** 5-lobed, in range 8–14+ mm long; tube + lower throat wide-cylindric slightly wider at top, ca. 3×3.5 mm, mostly whitish and somewhat glossy, slightly grooved, glabrous; upper throat widely flaring; lobes rounded-obovate, $7\text{--}8.5+ \times 6\text{--}7$ mm, light yellow lacking markings, overlapping at bases, outer (lower) surface of upper throat and lobes densely hairy, inner (upper) surface glabrous, to midpoint hairy on lower surface, above midpoint minute, sessile glandular hairs visible; **stamens** 5, unequal, fused to near base of corolla; filaments compressed front-to-back, of upper $3 \pm$ straight, 4–5 mm long, light orange, conspicuously hairy, the hairs yellowish, of lower 2 hooked and 5.5–6 mm long, yellow-orange, glabrous; anthers basifixed, dithecal, fan-shaped, ca. 1×1.5 mm, orange to orange-red, dehiscent across top in bud; pollen abundant, yellow-orange; **pistil** 1, to 12 mm long; ovary ovoid, ca. 2×2 mm, densely white-tomentose, 2-chambered, each chamber with many ovules; style erect, cylindric, 4.5–9.5 mm long, light

green to green, often densely hairy to midpoint and glabrous above midpoint; stigmatic tip somewhat wedge-shaped, dark green. **Fruit:** capsule, dehiscent, 2-valved, many-seeded, ovoid, 7.5–10.5 × 7–7.5 mm, brown, densely covered with stellate hairs, with persistent calyx having appressed, stellate-hairy lobes. **Seed:** corncoblike trunk on both ends and somewhat 4–6-angled, 0.55–0.8 × 0.4–0.5 mm, brown and dark brown, having pits and bumps in vertical rows.

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