

Vascular Plants of Williamson County
Valerianella amarella – HAIRY CORNSALAD [Valerianaceae]

Valerianella amarella (Engelm.) Krok, HAIRY CORNSALAD. Annual, taprooted, not rosetted, 1-stemmed at base, erect, above midplant equally 2-forked (“dichotomous”) and 2-forked at successive nodes, in range 10–30(–50) cm tall; shoots with a pair of basal leaves and several pairs of cauline leaves often ascending to suberect, foliage somewhat foul-smelling (oil cells in tissues), essentially glabrous. **Stems:** 6-ridged, to 2.5 mm diameter, with 3 conspicuous ridges descending from each leaf (6 per node), internodes to 90 mm long, light green. **Leaves:** opposite decussate, simple and petiolate (at the lowest 2 nodes) and sessile, without stipules; petiole flat, to 5 mm long, flared at base appearing fused, indistinct from blade; blade oblanceolate to obovate or oblong, $< 10\text{--}60\text{(–}110) \times < 3\text{--}15\text{(–}23)$ mm, long-tapered at base, entire and somewhat wavy on margins, sessile leaves short-hirsute ciliate at base only, obtuse to rounded at tip, 3-veined at base with prominent midrib sunken on upper surface and conspicuously raised on lower surface but lateral veins often faint, dull light green. **Inflorescence:** compound of dichasial cymes, terminal, 2 equal, principal units arising from terminal node of shoot (thyse), each unit “dichotomously” decussately 2-branched at (0)1–3 nodes before forming condensed, headlike cymes, wishbonelike, the heads typically 2, 4, 8, or 16 in a spreading, flat-topped display, display 12–120+ mm across (scaling with plant size), each head of several–many flowers, display having many flowers open at the same time, bracteate, essentially glabrous; bract subtending peduncle (paired at node) = sessile cauline leaf spreading on the largest plants to diminutive, linear (3 mm long), and appressed to peduncle on the tiniest plants; peduncle 4-sided, 2 faces flattish to convex, 2 faces furrowed, $< 15\text{--}30+$ mm long (scaling with plant size), glabrous; bracts at nodes above peduncle opposite decussate, leaflike but decreasing upward, at node 1 bracts mostly obovate and at nodes 2 or 3 often forming a base of basal lobes (auriculate) short-ciliate, at node 1 mostly lacking a terminal flower between the pair of rachises and at node 2 and 3 commonly with a terminal flower between the pair of rachises; head short-stalked and subtended by a pair of auriculate, acute-ovate bracts to 2.5 mm long; involucre formed outside the flowers by 1 subtending bractlet of each flower, bractlets suberect, ovate, to 2×1 mm, green or with incomplete colorless margins; dichasial cyme of head highly condensed with sessile and subsessile flowers, having a central flower with a lateral pair of buds, the buds in turn with a lateral pair of younger buds oriented at 90° of the previous axis, subtending bractlets in sequence decreasing in size and clustered with juvenile bractlets, bractlets when young minute glandular hairs on margins. **Flower:** bisexual, \pm radial, in range 3–4 mm across (corolla); **calyx** essentially absent and indistinguishable if present from top rim of ovary; **corolla** 5-lobed, arising from top of ovary, white, lacking hairs; tube cylindric, 0.5×0.2 mm; throat funnel-shaped, 1.5 mm long, orifice 1 mm across, inner surface short-pilose and above midpoint with minute glandular hairs; limb with widely spreading, subequal lobes, ovate-oblong rounded at tip, $1\text{--}1.3 \times 0.6\text{--}0.9$ mm, subequal but at least 1 lobe slightly wider; **stamens** 3, arising on corolla at midthroat, exserted; filaments 2.5–3 mm long, white, ascending later arching and aging deflexed between corolla lobes; anthers medifixed, dithecal, somewhat cream-colored, longitudinally dehiscent; pollen yellowish; **pistil** 1; ovary inferior, cup-shaped slanted on top, ca. 0.5×0.4 mm, green, with developing short hairs (some becoming hooked before anthesis, unequally 3-chambered, only the largest

chamber with 1 ovule; **nectary disc** surrounding base of style, short, greenish; style 1, exserted, cylindric and never straight, 3 mm long, white, minutely 3-lobed and papillate at top. **Fruit:** achene (cypsela), 1-seeded, ovoid, $1.5\text{--}1.9 \times 0.7\text{--}1$ mm, brown, pericarp \pm hard, with a midridge on rounded back and 2 lateral ridges, densely covered with hooked hairs (uncinate) except lacking hairs on 1 indented face of the acute tip; seed located in the largest chamber, and other chambers empty. **Seed:** difficult to separate from fruit wall.
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