

Vascular Plants of Williamson County

Diaperia prolifera var. *prolifera*— FLATHEAD RABBIT-TOBACCO, BIGHEAD RABBIT-TOBACCO
[Asteraceae]

Diaperia prolifera (Nutt.) Nutt. var. *prolifera*, FLATHEAD RABBIT-TOBACCO, BIGHEAD RABBIT-TOBACCO. Annual, fine-taprooted, briefly rosetted, 1–several(–18)-stemmed at base, initial shoot with a terminal, flattish "head" = an inflorescence array (glomerule), the principal glomerule 20+ mm across, from the glomerule later forming 1–5 spreading to ascending branches in canopy ("proliferate"), in range 2.5–13 cm tall; shoots with ephemeral basal leaves and many, overlapping cauline leaves appearing grayish to grayish green, with densely white-woolly stems and inflorescence arrays, velveteen with hairs less dense on foliage and green bracts, lacking glandular hairs and not aromatic. **Stems:** cylindrical, to 1 mm diameter at base and axes of canopy branches ca. 0.6 mm diameter, tough, the lower stems aging purple-red, internodes short–4 mm long (the lowest internode of a canopy branch to 10 mm long), without ridges decurrent from blades, with dense wool of long hairs oriented longitudinally. **Leaves:** helically alternate, simple, petiolate (basal leaves) and sessile (cauline leaves), without stipules; petiole of basal leaves flattened, to 4 mm long indistinct from blade, with midvein raised on lower surface; blade oblanceolate, < 5–13 × 1.5–4 mm, not clasping at base, entire and somewhat wavy or inrolled under on margins, obtuse to rounded at tip, only midrib visible raised on lower surface, cobwebby-woolly and surfaces equally hairy light yellow-green. **Inflorescence:** heads, 4–40 in terminal, compact, platelike, glomerule, glomerule = cymelike array of heads mostly hidden by thick, white wool (lanuginous) until flowering heads become partially exerted < 1 mm, the oldest head in center, head disciform, ± ellipsoid, ca. 3 × 1.5–2 mm, in range with ca. 15 pistillate peripheral flowers lacking pappus (epappose), 2–4 functionally staminate central flowers, sessile, subtended by bracts (capitular leaves), bracteate, densely white-woolly; capitular leaves like cauline leaves, widespreading from glomerule; **involucre** hidden in thick wool, of 4–6 helically alternate phyllaries, membranous aging scarious, obovate to ovate and relatively flat, to 2.5 mm long, colorless or with fine green midline, having some loose, crooked woolly hairs on outer (lower) surface above midpoint; receptacle conic, ca. 0.5 mm across, having bractlets (paleae) subtending all flowers, never folded; bract subtending head having suberect blade emergent from mat of hairs, overall appearing petiolate with green blade to 2 mm long; paleae of pistillate peripheral flowers resembling phyllaries, ± erect, ovate, ca. 2.5 × 1.3–1.5 mm, strongly cupped behind pistillate flower, minutely jagged, loosely woolly on rounded back above midpoint; paleae of staminate central flowers erect and adherent into a column by intertwining of hairs, ± elliptic to narrowly ovate and obtuse at tip, 1.5–1.7 × 0.8 mm, with green stripe or mottled green, slightly cupped, densely hairy with matted, crooked, woolly hairs base-to-tip. **Pistillate flower:** radial, ca. 0.1 mm across; **calyx (pappus)** absent; **corolla** minutely 4-toothed, tubular, ca. 2 × 0.1 mm, colorless, enlarged at base around nectary disc; **stamens** absent; **pistil** 1, ± 3 mm long; ovary inferior, narrowly ellipsoid and straight, 0.5–0.6 × 0.2 mm, whitish, 1-chambered with 1 ovule; **nectary disc** surrounding style at base, short; style exerted 0.5 mm from corolla, threadlike, 2-branched, the stigmatic branches spreading and arching, ca. 0.4 mm long, whitish. **Staminate flower:** radial, appearing bisexual, 0.25 mm across; **calyx (pappus)** absent; **corolla** minutely 4-

lobed, colorless; tubular cylindric, $\pm 0.7 \times 0.2$ mm; throat ± 0.7 mm long, indistinct from throat, slightly expanded around anthers; lobes deltate, < 0.15 mm; **stamens** 4, fused to top of corolla tube; filaments < 0.3 mm long; anthers fused into cylinder surrounding style, basifixed, dithecal, 0.4–0.45 mm long, light yellow, with short tails at base and sterile colorless appendage at tip, the appendages scarcely exerted, longitudinally dehiscent; pollen light yellow; **pistil** 1, included, normally sterile; ovary inferior, wedge-shaped, ca. 0.2 mm long, whitish, presumably 1-chambered but without ovule; style included, threadlike, 1.2 mm long, colorless. **Fruits:** cypselae (achenes) of only pistillate flowers, without pappus, biconvex or compressed ellipsoid, $0.9\text{--}1.1 \times 0.3$ mm, white aging light brown, beaded with raised cells in vertical lines; with persistent corolla and style.

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