

Vascular Plants of Williamson County

Hymenopappus scabiosaeus var. *corymbosus* – OLD PLOWMAN [Asteraceae]

Hymenopappus scabiosaeus L'Hér. var. *corymbosus* (Torrey & A. Gray) B. L. Turner, OLD PLOWMAN. Biennial herb, taprooted, conspicuously rosetted, 1-stemmed at base, mostly with erect principal axis having a terminal, flat-topped inflorescence composed of ascending branches, on large individuals with branches arising gradually downward, in range 40–95 cm tall; shoots with many basal leaves and to 10 cauline leaves, basal leaves of year 1 withered but persistent during flowering of year 2, leaves deeply pinnately lobed to 250 × 100 mm, coarse on lower plant and having linear lobes on upper cauline leaves, with cobwebby hairs and widely spaced, short-stalked to sessile glandular hairs concealed beneath tomentum. **Stems:** 8-ridged, in range to 14 mm diameter, with 3 ridges descending from each leaf, tough, ridges often red-purple, internodes to 60 mm long, somewhat whitish from long, longitudinally oriented, appressed cobwebby hairs; solid, aging woody. **Leaves:** helically alternate, 1–2-pinnately lobed, primary lobes alternate and appearing compound to axis or somewhat paired along leaf axis especially above midblade, lower primary lobes diminutive and widely spaced to 50 mm long at and above midblade, petiolate, without stipules; petiole widely flared at flattish at base, tough and permanently attached to stem, above ± 3-sided, to 70 mm long, of upper cauline leaves indistinct from blade axis, cobwebby hairs dense in channel; primary leaflet with alternate secondary lobes and teeth, on lower leaves to 8 mm wide, sublobes and teeth, acute to obtuse, lateral primary lobes asymmetric wider and often more lobing on trailing side, terminal primary lobe ± symmetric, pinnately veined with principal veins slightly sunken on upper surface and midrib raised on lower surface, upper surface green and lightly hairy, lower surface whitish and densely cobwebby with glandular hairs. **Inflorescence:** heads, in terminal, paniclelike array ± flat-topped with lateral branches overtopping central branches ending cymelike with to 3 heads, collectively in range 70–250+ mm across with 20–100+ heads, head discoid, 12–16 mm across, to 23 bisexual disc flowers, outer flowers arching over involucre and center flowers ascending to erect, bracteate, with short-stalked glandular hairs; bract subtending branchlet and along peduncle long-acuminate, < 3.5–5 mm long, green, 1-veined, upper surface glabrous, lower surface with arching short hairs and glandular hairs having colorless heads; branchlet axes and peduncle ascending to erect, ca. 8-ridged; **involucre** ± hemispheroid, ca. 7 × 7 mm, phyllaries 11–14, obtuse to rounded (notched), outer 3 phyllaries 3.3–4 × 0.8–1.3 mm, mostly green with narrow white margins, middle phyllaries 5–6.2 × 1.8–3 mm, cupped where next to disc flower, greenish below midpoint with narrow white margins, with short hairs and glandular hairs, inner phyllaries 2, 5 × 1.2 mm, mostly white, glands on some white tissue next to green; receptacle domelike, lacking bractlets (paleae), without hairs. **Disc flower:** bisexual, radial, 2 mm across, fragrant like sweet alyssum (*Lobularia*); **calyx (pappus)** of 14–20 scales in 1 series, scales fan-shaped to broadly obovate, to 0.5 mm long; **corolla** (4–)5-lobed, outer surface before anthesis with short-stalked glandular hairs having colorless heads; tube conspicuously domelike at base and cylindrical above, ca. 2.3 mm long (dome 0.4 × 0.7 mm), yellowish green, glandular-pubescent; throat abruptly expanded, ± bell-shaped, 1.3–1.5 mm long, white but greenish at base, faintly 5-ribbed to sinuses; lobes reflexed at anthesis, triangular to deltate, 1.3 × 1.3–1.5 mm, white; **stamens** 5, fused to top

of corolla tube; filaments erect, ± 1.5 mm long, white, glabrous; anthers fused into cylinder surrounding style, fully exerted, basifixed, dithecal, ± 1.7 mm long including appendages (lacking tails), sacs pale yellow with reddish stripes, having glandular hairs on outer side of anthers and 10+ glands on ovate appendages 0.5×0.3 mm, longitudinally dehiscent, appendages leaning inward before style exerted; pollen pale yellow; **pistil** 1, ca. 7 mm long; ovary inferior, 4–5-sided, of peripheral flowers top-shaped \pm rounded at top, 2.4×1 mm, of central flowers wedge-shaped to inverted pyramidal, green but greenish white at base and white above, ca. 15-ribbed, with short ascending hairs along ribs (hirtellous), having short-stalked glandular hairs, 1-chambered with 1 ovule; **nectary disc** surrounding base of style, somewhat 2-tiered, 0.25 mm long, tiers 0.5 mm and 0.35 mm wide, pale green; style ca. 4.5 mm long, white from base upward, 2-branched below midpoint, the stigmatic branches broadly elliptic, pale yellowish green with faint reddish streaks, soon recurved and conspicuous papillate-hairy on outer (lower) surface approaching tip. **Fruit:** cypselae (achenes), inverted pyramidal 4–5-sided, $3.5\text{--}4.2 \times 1.5\text{--}2$ mm, brown but tannish at narrow base, inconspicuously 3-ribbed on each face, uniformly short-hirsute with ascending hairs; pappus of to 20 short, fan-shaped scales.

A. C. Gibson