

Vascular Plants of Williamson County

Amphiachyris dracunculoides – COMMON BROOMWEED [Asteraceae]

Amphiachyris dracunculoides (DC.) Nutt. (syn. *Gutierrezia dracunculoides*), COMMON BROOMWEED. Annual, taprooted, not rosetted, 1-stemmed at base (woody), canopy flat-topped to slightly domed with ascending branches and branchlets, lower plant aging unbranched, then with a set of ascending branches at several successive ranches, then unbranched axes, and in flowering canopy with axillary branching at each node, in range 40–90 cm tall; monoecious; shoots with only widely spaced cauline leaves especially on slender young stems, on old shoot leaves abscised, green tissues glabrous with sessile glandular hairs, strongly aromatic when crushed and becoming resinous (excessively resinous when placed into plastic bags). **Stems:** initially strongly ridged, branchlets slender with 2–3 ridges descending from each leaf, tough and green (photosynthetic), gland-dotted, single principal axis forming a woody cylinder and bark, in range to 7(–10) mm diameter having brown bark with tan stripes (fibers). **Leaves:** helically alternate, simple and sessile, without stipules; blade linear, of canopy 5–32 × 0.5–1.2 mm, remotely toothed, acute (obtuse) often at tip, 1-veined somewhat raised on lower surface, glabrous, surfaces irregular with abundant sessile glandular hairs sunken in pits, of leaves of lower stems linear, to 60 × 4(–6) mm. **Inflorescence:** heads, in open, terminal, “leafy” cymelike arrays of 1–3 heads but indistinct from canopy branches, head radiate, in range 9–11 mm across mostly having 6–9 pistillate ray flowers and 23–29 functionally staminate flowers, bracteate, green tissues with sessile glandular hairs; peduncle indistinct from stem, with several alternate, linear leaves along axis, having 2–3 leaflike bracts at top (± calyculus; alternatively interpreted as outer phyllaries) 2.5–5 mm long slightly flared at base and appressed to involucre; **involucre** hemispheroid, 3.5–4 mm wide, becoming resin-coated (bagged), with 12–15 phyllaries in 2 series, 1-veined, lower portions colorless and smooth often with jagged thin margins and upper portion green (vein unpigmented) and gland-dotted, phyllaries 2.5 mm long (outer series) increasing to 4 mm long (inner series) with acute-triangular to deltate upper portion green and gland-dotted and broader lower portion cupped to formed involucre shape, in range the innermost series 6–9 subtending ray flowers sometimes later spreading for fruit dispersal; receptacle narrow and convex aging flattish, lacking bractlets (paleae), deeply pitted with each disc ovary surrounded by a crownlike structure to 0.4 mm long, lacking hairs. **Ray flower:** bilateral, 1.8–2 mm across (corolla limb); **calyx (pappus)** a short crown of 5–8 alternate, scarios scales, to 0.3 mm long, greenish, jagged on margins; **corolla** unlobed (no teeth), ca. 4 mm long; tube cylindrical with 5 raised veins (ribs), 0.4–1 × 0.3–0.35 mm, colorless to greenish, limb in range ovate-elliptic and obtuse-acute at tip, ca. 3 × 1.8–2 mm, bright yellow dull (upper surface) and satiny (lower surface); **stamens** absent; **nectary disc** at top of ovary surrounding base of style, ca. 0.15 mm long, translucent, producing thin nectar; **pistil** 1, ca. 2.5 mm long; ovary inferior, ± cylindrical with 7–9 low ribs, ± 1 × 0.35 mm, greenish to colorless, short-hairy, 1-chambered with 1 ovule; style ca. 1.3 mm long, colorless to greenish at base to yellow above, 2-branched, the branches stigmatic, half-exserted, ascending, 0.6 mm long, yellow (aging reddish). **Disc flower:** radial, 1 mm across, ca. 2.5 mm long; **calyx (pappus)** of 5–7 scarios scales 2.3–2.5 mm long fused into cup to 0.5 mm at base (sinuses unequal) projecting to top of flower bud, above cup scales linear

becoming narrowly club-shaped approaching tip, flat below midpoint and with raised midvein approaching tip, not barbed, persistent; **corolla** 5-lobed, ca. 2.5 mm long; tube indistinct from throat, ca. 0.4 mm long, greenish; throat bell-shaped, $\pm 1 \times 0.7$ mm, mostly colorless, with 5 raised veins (ribs) to sinuses, glabrous; lobes curved-spreading, triangular, 0.7–0.8 mm long, yellow, with thickened margins; **stamens** 5, attached near base of corolla, partially exerted (appendages); filaments ca. 1 mm long, yellow; anthers dorsifixed, dithecal, 1.5 mm long included narrow appendages, bright yellow, longitudinally dehiscent; pollen bright yellow; **nectary disc** at top of rudimentary ovary surrounding base of style, ca. 0.1 mm long, translucent, producing thin nectar; **pistil** vestigial, sterile, appearing like a short stalk < 0.2 mm long; style ca. 3 mm long at maturity exerted ca. 1 mm, yellowish at base to yellow above, 2-branched from midpoint, the branches stigmatic and conspicuously papillate, appressed, 0.5–0.6 mm long, the tip of stigmas exerted in bud. **Fruits:** cypselae (achenes), ellipsoid or aging barrel-shaped, in range ca. 2×0.8 mm, dark brown to purple (blackish), with low ribs somewhat visible, pubescent with hairs < 0.3 mm long and many hairs having minute glandular tips.

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