

Vascular Plants of Williamson County
Chrysactinia mexicana – DAMIANITA [Asteraceae]

Chrysactinia mexicana A. Gray, DAMIANITA. Subshrub, evergreen, not rosetted, several-stemmed at base, principal stems several-forked to form canopy with unbranched suberect terminal shoots to 150 mm long + producing a solitary inflorescence at top, in range < 40 cm tall; gynomonoecious; shoots with only cauline leaves, puberulent, foliage having spheroid oil glands (viewed at 7× magnification) especially evident on lower surface, aromatic when crushed. **Stems:** finely ridged aging cylindrical, to 3 mm diameter, with 1 fine ridge descending from each leaf; lower stems thin-woody, covered with brown periderm. **Leaves:** helically alternate, simple, short-petiolate, without stipules; petiole hemicylindric, ca. 1 mm long, light green, puberulent; blade linear to linear-oblongate, 5–10 × 1–1.5 mm, green and somewhat fleshy, not resin-coated, 1-veined (midrib obscure but upper surface inconspicuously sunken), entire, acute to obtuse with short whitish point at tip, oil glands spaced along a row on each side of midrib bulging on upper surface and darker green on lower surface. **Inflorescence:** head, solitary and terminal on relatively long peduncle exerted above canopy, radiate, in range 16–20 mm across, with 8(–13) pistillate ray flowers and 15–25+ bisexual disc flowers, occasionally individual ray flowers 2-lipped, bracteate; peduncle erect, slender, cylindrical, 50–75 × 0.5–0.7 mm, at anthesis flexible, light yellow-green, bracts helically alternate, widely spaced along and mostly appressed to axis and often the uppermost bract subtending involucre, bracts awl-shaped, 1–2 mm long, minutely ciliate on margins; **involucre** ± top-shaped, to 5 × 4 mm, of 8–10+ phyllaries in 1–2 series free essentially to base, outer phyllaries 0–2+ and to 3 mm long and inner phyllaries 8 in 1 series, ± oblong mounded outward mostly yellow-green having a conspicuous, ellipsoid oil gland 1 mm long just below a cupped whitish, spreading tip, puberulent above midpoint; receptacle domed, lacking bractlets (paleae), having each disc flower in a shallow pit surrounded by a low, crownlike rim sometimes with minute stalked glandular hairs. **Ray flower:** bilateral, 2–2.5 mm across; **calyx (pappus)** 30–40 capillary bristles in 1–2 series attached on short rim, stiff, ± unequal, 2–4 mm long, persistent aging grayish; **corolla** minutely 3-toothed; tube cylindrical, 1.5 × 0.3 mm, whitish, finely 5-veined, glabrous, lacking hairs except with some short glandular hairs at top and lower limb; limb widely spreading, ± elliptic, in range 6.5–9 × 2–2.5 mm, bright yellow, teeth minute, ± 6-veined, if 2-lobed inner lobe diminutive and ascending; **stamens** absent; **pistil** 1; ovary inferior, nearly cylindrical (inconspicuously ribbed), ca. 3 × 0.5 mm, whitish, short-hairy, 1-chambered with 1 ovule; **nectary disc** surrounding base of style, 0.2 mm long, whitish; style exerted, ca. 3.5 mm long, 2-branched, whitish at base and yellow above midpoint, the branches fully exerted and diverging, hemi-cylindrical papillate on rounded sides. **Disc flower:** radial, 2 mm across (spreading corolla lobes); **calyx (pappus)** 30–40 capillary bristles in 1–2 series attached on short rim, stiff, ± unequal, 2–4 mm long, persistent aging grayish; **corolla** 5-lobed, slightly > pappus; tube cylindrical, 1.5 × 0.3 mm, whitish, finely 5-veined, glabrous; throat cylindrical, 0.7 mm diameter, pale yellow at base to yellow above midpoint and veins somewhat glossy, short papillate-hairy; lobes triangular, ± 0.7 mm long, minutely papillate; **stamens** 5, attached at top of corolla tube; filaments ca. 2 mm long, pale yellowish, flattened front-to-back; anthers fused into cylinder surrounding style, fully exerted from corolla orifice, ± 2.2 mm long including triangular appendages at top,

yellow, longitudinally dehiscent; pollen yellow; **pistil** 1; ovary inferior, nearly cylindrical (inconspicuously ribbed), ca. 2×0.5 mm, whitish, short-hairy, 1-chambered with 1 ovule; **nectary disc** surrounding base of style, 0.2 mm long, whitish; style exerted after anthers dehisce, ca. 6 mm long, 2-branched, whitish at base and yellow above midpoint, the branches ca. 1.5 mm long, fully exerted and ascending, hemi-cylindrical papillate on rounded sides. **Fruits:** cypselae (achenes), \pm monomorphic, cylindrical, 3–4 mm long (of ray flowers longer), brown, short-hairy; pappus ascending capillary bristles appearing mostly in 1 series, 2–4 mm long.

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