

Vascular Plants of Williamson County

Hypochaeris glabra – SMOOTH CAT'S EAR, ANNUAL CAT'S EAR [Asteraceae]

Hypochaeris glabra L., SMOOTH CAT'S EAR, ANNUAL CAT'S EAR. Annual, taprooted, flat-rosetted, several-stemmed at base, acaulous (scapose) with 1–8 inflorescences from base, in range 17–65 cm tall; shoots with only basal leaves + bracts in inflorescence (cauline leaves), rosette 60–220 mm across, leaves sparsely short-hirsute; latex milky; taproot slender, tan, white-fleshed. **Stems:** at basal leaves, to 2.5 mm diameter, glabrous. **Leaves:** helically alternate, toothed to shallowly pinnately lobed, ± sessile, without stipules; petiole winged, 0–20 mm long, indistinct from blade; blade oblanceolate, in range 75–150 × 13–30 mm, gradually tapered to broad base (resembling a winged petiole), shallowly lobed to remotely dentate or subentire and stiff-ciliate on margins, lobes 3–6 per edge, the lobes alternate to opposite with roundish sinuses, long-toothed or broadly deltate, 4–6.5 mm long, obtuse to rounded at tip, pinnately veined with midrib slightly sunken on upper surface and raised on lower surface, nearly glabrescent at maturity but lower surface sparsely short-hirsute along midrib. **Inflorescence:** heads, in open, cymelike arrays arising from basal rosette, array of (1)2–11 heads, head ligulate, 7–14 mm across, of (20–)26–31(–40) flowers, bracteate, glabrous; axis below first head stemlike, 60–190 mm long, tough, ridged approaching head from ridges descending from phyllaries, solid at base to hollow approaching head; bract subtending peduncle resembling cauline leaf, oblanceolate to lanceolate or lanceolate-triangular, 5–55 × 1–13 mm decreasing upward, dentate with 1–5 teeth per side to entire; peduncle of head initially short, ridged, 30–160 mm long in fruit, with 2–4 bracts along axis with ridge descending from each bract, bract lanceolate-triangular, ca. 2 mm long, at top with 0–2 bracts surrounding involucre (calyculus), calyculus bracts < bracts of involucre; **involucre** of bracts subtending head, at anthesis bell-shaped, 7–10.5 mm long, 2.7–3.6 mm wide at base and 3.5–5 mm wide at top, increasing 2× in length and basal width, phyllaries ca. 15 in 4 series, erect becoming reflexed in fruit, ovate to oblong or linear-oblong, 2.9–9.5 × 1.3–2 mm, somewhat fleshy, green commonly purplish red at tip, outer phyllaries slightly ridged, white to pale green and minutely pubescent on thinner margins, inner phyllaries more prominently ridged, membranous and generally glabrous on margins, acute but very tip rounded; receptacle flat aging convex in fruit, with bractlets (paleae), paleae lanceolate-linear, 4.5–5 × 0.6–0.8 mm increasing to 17 × 1.2 mm in fruit, cupped around ovary, membranous, tapered to narrow tip, shallowly pitted with a lobed rim surrounding each ovary, glabrous. **Ligulate flower:** bisexual, bilateral, 1–1.5 mm wide, arching outward and extending beyond phyllaries; **calyx (pappus)** of many bristles of 2 sizes in 2 whorls, at anthesis < 4.5 mm long and appressed to corolla and unexpanded, greenish at base to colorless above, bristles of outer whorl barbed, slender and < inner whorl, inner whorl feathery with fine hairs (plumose); **corolla** 5-toothed, exserted from involucre; tube + throat cylindric, 2.7–4.4 × 0.2–0.3 mm, white at base to yellow at orifice, glabrous most of length but with a ring of scalelike hairs at or just below orifice; limb strap-shaped, 2.8–3.3 × 0.8–1.2 mm, bright yellow, truncate with 5 teeth, the teeth triangular, 0.15–0.3 mm long; **stamens** 5, fused to corolla just below orifice, exserted; filaments 0.2–0.3 mm long, yellow to pale yellow; anthers fused into cylinder surrounding style, basifixed, dithecal, ± 1.5 mm long, bright yellow, with transparent pale yellow tails and sterile appendages at tip, longitudinally dehiscent; pollen

bright yellow; **pistil** 1; ovary inferior, inversely conic (outer flowers) or narrowly obovoid to oblanceoid with a short neck (inner flowers), 0.6–1.3 × 0.3–0.4 mm, white, 1-chambered with 1 ovule; style 5.2–6.1 mm long, exerted, 2-branched, white at base and grading to light greenish yellow distally, with minute, upward-pointing teeth from 1 mm below fork to fork, the branches slightly flattened and expanded or tapered, ca. 0.5 mm long, light greenish yellow. **Fruits:** cypselae, ± dimorphic, of inner flowers long-beaked, with pappus in a whitish, spheroid array 40–45 mm diameter; fruit body of outer flowers narrowly inversely conic or ± club-shaped, 3.6–4.1 × 0.75–0.9 mm, 15-ribbed, brown with ribs darker than grooves and very dark brown at base, tapered to base, truncate at tip, the ribs ± rasplike with upward-pointing, blunt teeth or transverse ridges; fruit body of inner flowers narrowly fusiform, 3.7–4.3 × 0.5–0.7 mm, 15-ribbed with ribs like the outer cypselae, brown on the ribs, grayish-green and glaucous in the grooves, glabrous, tapered to base and to beak, the beak 6.7–7.7 × 0.15–0.2 mm, 5-angled or 5-ribbed; pappus of outer cypselae with 90–95 barbed bristles, bristles of outer whorl 0.4–5.2 mm long, tawny, bristles of inner whorl 5.7–9.9 mm long, densely white-plumose in lower 1/3 with plumose hairs of adjacent bristles intertwined and forming a cottony mass above cypselae, sparsely plumose above 1/3 and hairs not intertwined; pappus of inner cypselae with 35–44 bristles, light tan to light yellow, barbed bristles of outer whorl 0.5–7.5 mm long, fine, bristles of inner whorl 6.8–10.5 mm long, finely and sparsely plumose but also barbed.

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