

Vascular Plants of Williamson County

Erigeron philadelphicus var. *philadelphicus* – PHILADELPHIA FLEABANE [Asteraceae]

Erigeron philadelphicus L. var. *philadelphicus*, PHILADELPHIA FLEABANE. Biennial to short-lived perennial herb, not clonal, having an herbaceous caudex (not rhizomatous), fibrous-rooted, strongly rosetted at first flowering, 1–several-stemmed at base initially with a principal axis subsequently with more slender shoots from axils of upper basal leaves, erect to ascending, forming flowering branches from top of canopy downward at each node, in range 30–80 cm tall; gynomonocious; shoots with basal leaves and clasping cauline leaves, short-hirsute and hirsute, vegetative tissues typically not glandular-puberulent. **Stems:** low-ridged, to 7 mm diameter, with 2 ridges descending from each leaf, mostly not straight, first internode of lower axillary shoots 100+ mm long; pith spongy and white but internodes often aging hollow. **Leaves:** helically alternate, simple from unlobed to large blades shallowly pinnately lobed having 1–4 lateral lobes and a large terminal lobe, petiolate (basal leaves) and sessile and clasping (cauline leaves), without stipules; petiole narrowly winged, to 40 mm long (short petioles indistinct from blade), white, flaring at base, central axis raised on lower side, sparsely hairy to glabrate; blade of basal leaves obovate (the first-formed leaves) to oblanceolate in outline and lobed, 55–165 × < 20–40 mm, long-tapered at base, lateral lobes obtuse (broadly acute) defined by sinuses < 1/2 to midrib, terminal lobe obovate, entire or with low, widely spaced teeth, acute at tip, pinnately veined with midrib raised on lower surface, sparsely to moderately short-hirsute and hirsute with some hairs somewhat appressed; blade of cauline leaves oblanceolate (pinnately lobed) to oblong (short-lobed and toothed) or lanceolate (toothed to entire), clasping at base, prominent teeth and lobes < 10 per blade and widely spaced and never paired, acute at tip, conspicuously pinnately veined with midrib raised and other principal veins somewhat raised on lower surface. **Inflorescence:** heads, in cymelike arrays, array with several–many heads, terminal on each ascending shoot, principal array branches often to 7-headed, head radiate, in range 14–22 mm across, of 150–250+ pistillate ray flowers in 3–6 series and 140–250+ bisexual disc flowers (lacking peripheral, discoid flowers), yellow center of disc flowers 6–9 mm across, bracteate; bract subtending lateral branch of array leaflike and clasping, acuminate-ovate, to 35 × 15 mm, ciliate on margins, glandular-puberulent, upper surface with several hirsute hairs along midrib, lower surface short-hirsute; axes ridged, hirsute along ridges and glandular-puberulent, aging hollow; bract subtending peduncle acuminate-lanceolate, to 7 × 2.5 mm, ciliate on margins, glandular-puberulent, hirsute along lower midrib; peduncle ridged with a ridge descending from each outer phyllary, hirsute and glandular-puberulent, occasionally with a bract at top separated from involucre; **involucre** hemispheroid, of 50+ phyllaries in 2–3 series, 6–16 mm across, outer phyllaries strongly ridged and green with membranous margins, oblong-oblanceolate, 5.5–7 × 0.4–1.1 mm, middle series oblanceolate to elliptic, membranous with raised green midvein, inner phyllaries flattish and membranous with green midstripe, ca. 3 × 0.4–0.5 mm, entire or sparsely jagged on some margins, outer (lower) surface of outer phyllaries glandular-puberulent with hirsute hairs along midvein, lacking hirsute hairs on middle phyllaries, lacking nonglandular and glandular hairs on inner series; receptacle convex to dome, lacking bractlets (paleae), shallowly pitted with a low, crownlike rim around each ovary, glabrous, spongy to hollow beneath receptacle. **Ray flower:** bilateral,

< 0.5 mm across; **calyx (pappus)** dimorphic, outer whorl of minute, hairlike points (setae) < 0.25 mm long, inner whorl of 15–20 capillary bristles, bristles ca. 2 mm long, colorless; **corolla** acute to minutely notched at tip; tube cylindric, ca. $2 \times 0.2\text{--}0.25$ mm, colorless, < pappus, with several glandular hairs at top; limb widely spreading and never coiling, linear, $5\text{--}9(-10) \times 0.25\text{--}0.45$ mm, in range pure white, glabrous; **stamens** absent; **pistil** 1, ca. 2.5 mm long; ovary inferior, sausage-shaped to narrowly bell-shaped, $0.5\text{--}0.6 \times 0.25\text{--}0.3$ mm, translucent, short-strigose with upward-pointing hairs, 2-veined, 1-chambered with 1 ovule; style exerted, 2.2–2.8 mm long, translucent, 2-branched, the stigmatic branches ascending, 0.3–0.4 mm long, rounded on tip, minutely papillate. **Disc flower:** radial, ca. 0.4 mm across; **calyx (pappus)** dimorphic, outer whorl of minute, hairlike points (setae) < 0.25 mm long, inner whorl of 15–20 capillary bristles, bristles ca. 2 mm long, colorless; **corolla** 5-toothed, 2.5–3.3 mm long; tube cylindric, ca. 0.7×0.5 mm long, colorless; throat narrowly funnel-shaped, colorless with 5 faint, yellowish veins; teeth ascending to suberect, acute, 0.35–0.4 mm long, yellow, papillate on outer (lower) surface; **stamens** 5, fused to top of corolla tube; filaments 1–1.2 mm long, yellowish to above midpoint and reddish orange above midpoint; anthers fused into cylinder surrounding style, 1 mm long, yellow, longitudinally dehiscent; pollen yellow; **pistil** 1, ca. 2.5 mm long; ovary inferior, sausage-shaped to narrowly bell-shaped, $0.5\text{--}0.6 \times 0.25\text{--}0.3$ mm, translucent, short-strigose with upward-pointing hairs, 2-veined, 1-chambered with 1 ovule; **nectary disc** obscure, nectar not observed; style not exerted from anthers, 2 mm long, white at base and yellow above midpoint, 2-branched, the stigmatic branches at level of anthers and not spreading, oblong, 0.5×0.2 mm. **Fruits:** cypselae (achenes), monomorphic, oblong, 0.6–1.1 mm long, tannish to pale brown, 2-veined, short-strigose with upward-pointing hairs; pappus of short setae (outer whorl) and 15–20 capillary bristles (inner whorl), readily falling.

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