

## Vascular Plants of Williamson County

### *Erodium cicutarium* – REDSTEM FILAREE [Geraniaceae]

*Erodium cicutarium* (L.) L'Hér., REDSTEM FILAREE. Annual, taprooted, rosetted with spreading leaves or with ascending leaves, "acaulous" with several–many ascending, leafy inflorescences, decumbent to ascending, in range 7–40 cm tall; shoots with basal leaves (so-called cauline leaves treated here as bracts), basal rosette to 280 mm across, leafy inflorescences strongly 1-sided with ascending to erect axillary lateral branches, densely glandular-hairy, the hairs mixed stalked to sessile with colorless heads. **Stems:** cylindrical, to 7 mm diameter, glandular hairs radiating with straight stalks, lower stems often red-purple. **Leaves:** helically alternate (bracts opposite or rarely in a whorl of 3 at node, some pairs markedly unequal (anisophyllous), odd-1-pinnately compound with 7–15 ± sessile principal lobes, the lateral leaflets and lobes alternate or opposite and deeply pinnately lobed, petiolate, with stipules; stipules 2, attached to stem at node, triangular to deltate-ovate to lanceolate, 3–8 × 1–3 mm, membranous, semitransparent and whitish with a green midvein, ciliate on margins, 2-veined, and sometimes 2-toothed at tip; petiole slightly channeled or flat on upper side, 5–100 mm long, on basal leaves ca. as long as blade, flaring at base, hairy like stem but when glandular heads missing aging ± short-hirsute to short-villous; blade narrowly elliptic to oblong or oblanceolate in outline, 25–75 × 15–37 mm, lateral leaflets and principal lobes ± ovate in outline, 3–20+ mm long, sessile to subsessile, sublobes 1–3 mm wide and several-toothed, the teeth acute to obtuse, terminal leaflet often asymmetrically 3–7-lobed and broader than lateral leaflets, pinnately veined, glandular hairs evenly distributed and often aging without hairs. **Inflorescence:** leafy, cymelike array with several umbel-bearing branches, axillary from each basal leaf of rosette, axes at each fork unequal and subtended by an unequal pair of leaflike bracts (cauline leaves), the larger bract subtending the continuing axis, the smaller bract subtending a short lateral branch having a narrower axis, umbel from each node 2–8-flowered with erect flowers, bracteate, glandular-hairy like shoot; bract at principal node leaflike and with pair of stipules, often adjacent stipules on a side of node fused, the fused stipules broader (to 4 mm), hairs at node and on bract often aging without glandular heads and appearing short-hirsute; peduncle bearing umbel ascending, slender and < 1 mm diameter decreasing upward, often 45+ mm long in fruit, often red-purple, with radiating glandular hairs, with involucre at tip; **involucre** of bractlets subtending pedicels of an umbel, bractlets 3–5 in 1 whorl, stipulelike, collarlike, the stipules fused at bases except on adjacent edges of 1 pair, scarious, acute-toothed with 1 green vein to each tooth, the teeth 1–2.5 mm long, short-ciliate; pedicel at anthesis (flower erect), 4–8 mm long increasing 2× in fruit, 0.3 mm diameter and swollen at base and tip, red-purple, ascending in fruit but often with a bend above midpoint making fruit axis ± erect. **Flower:** bisexual radial, 8–15 mm across; **sepals** 5, overlapping at base, initially spreading, elliptic to ovate, in range < 4–5 × 1.8–2.1 mm increasing somewhat and erect in fruit, distinctly 3–5-veined, with veins ridged on lower surface dark green (reddish) and between veins lighter green (aging pinkish), translucent-white membranous to pinkish or purplish pink on margins, upper surface glabrous and lower surface short-strigose with some longer stiff hairs, minutely glandular-hairy, with a subterminal, green, fingerlike projection 0.3–0.6 mm long (not an awl), having 1 or 2 bristles at top, the bristles 0.3–1.2 mm long, sepal tip membranous and

densely short-ciliate; **petals** 5, widely spreading, ovate to elliptic, 5–9 × 2–3.5 mm, rose lavender to reddish purple slightly darker at base, at base ciliate on margins and short-clawed or abruptly tapered, palmately 3-veined, the veins glossy and darker than rest of petal; **nectaries** 5, appressed to bases of stamens (alternate with petals), flattened and roundish, ca. 0.3 mm wide, dark red or dark purplish red; **stamens** 5 fertile opposite sepals, staminodes 5 opposite petals, free; filaments of fertile stamens erect, broadly awl-shaped long-tapered above midpoint, 2.5–3.1 mm long, ca. 0.4 mm wide at base, light yellowish green at base fading to whitish below midpoint, then reddish purple fading to almost white at tip, appressed to pistil, below midpoint expanded portion thin, the slender tip thicker; anthers versatile, dithecal, ± oblong, 0.7–1.2 mm long dark reddish purple (occasionally yellow in bud), longitudinally dehiscent; pollen reddish orange to orange; staminodes like filaments but slightly narrower and shorter, 2–2.7 mm long, not white at tip; **pistil** 1, ca. 2.5 mm long, densely pubescent; ovary superior, 5-lobed, lobes ± ovoid in outline, at anthesis ca. 1 × 1 mm, green but densely covered with white stiff hairs < 0.5 mm long, 5-chambered, each chamber with 1 ovule attached to center; style column ca 1 mm long with 5 free, ascending to spreading, fingerlike tips ca. 0.5 mm long, deep reddish purple, densely white-pubescent at base and shorter pubescent to puberulent above, the branches stigmatic, papillate on inner surface. **Fruit:** schizocarp, of 5 dry, 1-seeded mericarps, before dehiscence erect, needlelike (= beaks) with swollen base (= seed bodies), seed body narrowly oblanceoloid or club-shaped, 5–6.5 × 0.8–1 mm, sharply pointed at base, cinnamon-brown, open on inner edge, densely hirsute, with 2 acutely-rimmed, circular concavities at tip (1 on each side of seed chamber), sometimes with a crescent-shaped concavity or furrow below each circular concavity, the concavities stalked-glandular (glabrous); awn initially 28–40 mm long, brown to purplish brown, becoming tightly helically twisted forming an erect shaft with to 8 gyres to above midpoint and having an arching terminal portion, short-strigose on both surfaces or sometimes with some very long straight “hairs” trapped by gyres along shaft.

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