## Vascular Plants of Williamson County Geranium pusillum – LITTLE GERANIUM [Geraniaceae]

Geranium pusillum Burm. f., LITTLE GERANIUM. Annual, taprooted, rosetted, several-many-stemmed at base, decumbent to ascending, in range 10-25 cm tall; shoots with basal leaves and cauline leaves, cauline leaves unequal at node (1 with shorter petiole and smaller blade), stiff-hairy, with some spreading glandular hairs on vegetative plants and mostly short glandular-hairy in flowering canopy. **Stems:** cylindric, to 3 mm diameter, swollen just above each node, internodes to 55 mm long, green or swelling tinged pinkish, uniformly short glandular-hairy, the hairs straight and  $\perp$  or slightly backward-leaning and ca. 0.1 mm long, initially some to many hairs initially small glandular heads later losing heads and appearing nonglandular. Leaves: helically alternate (basal leaves) and opposite (cauline leaves), deeply palmately lobed with 5–7 principal lobes and sinuses 60-80% to base and lobes often with 3 sublobes, petiolate, with stipules; stipules 2, attached to flared base of petiole, acuminate-triangular, to 2.5 mm long, whitish and papery or with reddish midvein, conspicuously ciliate on margins; petiole cylindric except at flaring base, to 70 mm long (basal leaves) reduced upward, glandular-hairy; blade roundish, in range 11–22 mm, principal lobes wedge-shaped in outline, with oblanceolate to oblong sublobes, lobes on cauline leaves to 5 mm long, lacking red point at tip, palmately veined at base with 3 or 5 veins to principal lobes and principal veins sunken on upper surface and raised on lower surface, hirsute and shorthirsute with upward-arching hairs, hairs longer especially along veins and on margins. **Inflorescence:** 2-flowered cyme, arising at node on side opposite cauline leaf with another axis continuing shoot, hirsute and short-hirsute and conspicuously short glandular-hairy having colorless heads; peduncle ascending, at anthesis of first flower 3.5-4 mm long increasing  $2-3\times$  in fruit, short glandular-hairy; bractlet subtending pedicel = 2 narrowly triangular stipules, ascending, to 1 mm long, colorless, persistent; pedicel ascending to spreading, light green, densely glandular-hairy. Flower: bisexual, radial, ca. 4 mm across; sepals 5, overlapping in bud with exposed surfaces, ± erect, ovate lacking terminal awn,  $2-2.3 \times 0.9-1.1$  mm increasing to 3 mm long and appressed, firmly attached, and erect in fruit, green with narrow membranous margins, flat (margins not inrolled), 5-veined (outer sepals) to 3-veined (inner sepals), short glandular-hairy and hirsute and short-hirsute, the longer hairs 0.5–0.8 mm especially on margins; **petals** 5, ascending, narrowly fan-shaped and lacking claw, in range ca.  $1.8-2 \times 1$  mm, white at base to pink and above midpoint strong rose-purple or orchid, pinnately veined, glabrate (inconspicuous hair or hairs on white margin), notched (obcordate) at tip with shallow sinus; stamens 10 in 2 whorls, free, dimorphic, 5 fertile and 5 sterile (staminodes); filaments of fertile stamens (inner whorl) 1.5–1.7 mm long, colorless aging pinkish, flared and stiff-ciliate to midpoint, filaments of sterile stamens (outer whorl) ± 1 mm long; anthers at level of stigmas, dorsifixed, dithecal, 0.3–0.4 mm long, length < width, mostly pale purplish with purple lines where dehiscent, longitudinally dehiscent; pollen colorless; **pistil** 1, at anthesis 1.7–1.9 mm long; ovary superior, 5-lobed, ca.  $1 \times 0.6-0.7$  mm, each lobe compressed side-to-side, hidden by dense cover of ascending white hairs, 5-chambered, each chamber with 1 ovule; style column evenly short glandular-hairy with radiating hairs and short-hairy, 5-branched, green to below branches, the stigmatic branches fingerlike, 0.7–0.8 mm long, light green and

papillate-stigmatic on inner side, drying purplish. **Fruit:** schizocarp, of 5 dry, 1-seeded mericarps dehiscent on lower to inner face separating from base by coiling upward, before dehiscing with the central style segment; fruit body ellipsoid,  $2 \times 1$  mm, dark brown, not inflated, densely short-hirsute; beak in range coiled like a comma, 5–6 mm long, attached at upper point on inner face of fruit body, with glandular hairs on inside of coil. **Seed:** ovoid compressed,  $1.3 \times 0.9 \times 0.4$ –0.5 mm, dull red, often sunken on 1 or 2 faces, lacking pits (smooth), with oblique hilum at base, tardily dehiscent from mericarp. A. C. Gibson