Vascular Plants of Williamson County

Cuscuta pentagona var. *pubescens* – PAPILLATE FIVE-ANGLED DODDER [Convolvulaceae]

Cuscuta pentagona Engelm. var. pubescens (Engelm.) Yunck., PAPILLATE FIVE-ANGLED DODDER. Annual parasitic vine, twining, flexible-stemmed, attached to host stems with haustoria (locally at least on Tragia ramosa and Phyllanthus polygonoides and unidentified grass); shoots leafless, light orange (lacking chlorophyll), glabrous. Stems: cylindric, ca. 0.3 mm diameter, light orange, with scattered, minute bumps. Leaves: absent. Inflorescence: axillary cluster of condensed cymes, each cyme several-flowered, bracteate, glabrous; bract subtending principal forks, cupped awl-shaped, 1–1.7 mm long, fleshy, colorless, papillate to midpoint, bract at base of cyme nearly sheathing becoming less sheathing upward; axes papillate, pale orange; bractlet < pedicel. Flower: bisexual, radial, 3-3.5 mm across; buds spheroid (not noticeably angled); calyx 5-lobed, inconspicuously 5angled, mostly colorless (white); tube cup-shaped, ± 1.3 mm long, green at base beneath ovary, without veins; lobes ascending, deltate-ovate, ca. $1.1 \times 0.9-1$ mm; corolla 5-lobed, with horizontally spreading but later strongly reflexed lobes, outer surfaces beaded (minutely vesicular); tube short bell-shaped, ca. 1.5×2 mm, 0.6 mm wide at base, outer surface short-papillate, internally having 5 appendages fused to base of corolla tube opposite the stamens, the appendages ascending leaning toward styles, tongue-shaped, ca. 1.2 mm long, densely fringed with ca. 30 colorless, fingerlike projections, completely filling the corolla tube and hiding the ovary; lobes not overlapping, acute-ovate, ca. 1.2 mm long, upper surface not papillate; stamens 5, fused to corolla at sinuses with filaments decurrent on corolla tube; filaments ascending, ± 0.6 mm long, white, glabrous; anthers dorsifixed, dithecal, at anthesis positioned over stigmas, 0.5 mm long, orange-yellow, longitudinally dehiscent; pollen orange-yellow; nectary disc around base of ovary, at anthesis inconspicuous and without nectar, in fruit muffin-shaped, glossy dark green, producing nectar; **pistil** 1; ovary superior, oblate, $0.6-0.7 \times 1$ mm, green and papillate, 2chambered, each chamber with 2 ovules; styles 2, free from base, suberect, unequal, 0.5–0.6 mm long, white; stigmas capitate, terminal, hemispheric, 0.25 mm diameter, orange. Fruit: capsule, weakly dehiscent rupturing irregularly, typically 2–4-seeded, broadly ovoid, < 2 mm wide, aging with orange seeds showing through thin wall and somewhat bulging at seeds, conspicuously papillate. Seed: ovoid, ca. 0.7×0.35 mm, light orange.

A. C. Gibson