

## Vascular Plants of Williamson County

*Croton monanthogynus* – ONESEED CROTON, DOVEWEED, PRAIRIE-TEA [Euphorbiaceae]

*Croton monanthogynus* Michx., ONESEED CROTON, DOVEWEED, PRAIRIE-TEA. Annual, taprooted, not rosetted, mostly 1-stemmed at base, branched at each node, mostly in 3–4-branched pseudowhorl at the lowest fork with unequal axes, often 2–3-branched at subsequent (secondary) forks and unequally 2-forked for other branchlets, erect with ascending principal branches, 20–45 cm tall; dioecious; shoots with only cauline leaves, foliage along primary stem absent at flowering, blades bi-colored green on upper surface and light gray (silvery) on lower surface, strongly scented when disturbed or crushed, stellate-pubescent, the hairs having at least 8 fine, arms radiating from a domed center aging reddish to brown. **Stems:** cylindric, to 4 mm diameter, tough but flexible and becoming woody, light green aging tannish to light brown, internodes to 80 mm long, stellate-hairy having appressed arms and often aging with red dome at center. **Leaves:** helically alternate, simple, petiolate, stipules absent (obscure); petiole slightly flattened on upper side at base, < 4–15 mm long, stellate-pubescent; blade especially when young often folded upward along midrib, ovate, < 15–30 × < 6–17 mm, subcordate to broadly tapered at base, entire, acute to obtuse at tip, pinnately veined often with 5 principal veins at base and principal veins yellowish and slightly sunken on upper surface and raised on lower surface, stellate-pubescent, upper surface dull green to grayish green having stellate hairs in one layer and somewhat spaced, lower surface light gray and reflective with dense, layered stellate hairs concealing green tissue, each hair with a central erect arm and 10+ subequal, radiating arms. **Inflorescences:** unisexual, solitary and terminal (pistillate flower) and raceme to 7-flowered (staminate flower) often with flowers condensed at top, 1 pistillate and 1 staminate inflorescence together on separate stalks in fork of axes, inconspicuously bracteate; peduncle of staminate raceme to 10 mm long, stellate-pubescent; bractlet subtending pedicel of staminate flower inconspicuous, ca. 0.25 mm long + arms of stellate hairs, reddish; pedicel of staminate flower cylindric, ca. 2 mm long, white; peduncle (pedicel) of pistillate flower ca. 3 mm long, white, stellate-pubescent. **Staminate flower:** radial, 2.5–3 mm across; **calyx** deeply 3–4(–5)-lobed, fused only at base; lobes widely spreading, ovate, ca. 1.5 mm long, green with white margins, lower surface stellate-pubescent; **petals** 3–4, widely spreading, oblanceolate, ca. 1.5 × 0.45–0.5 mm, white, lacking stellate hairs, short-ciliate on margins above midpoint and densely ciliate on margins below midpoint + several hairs on upper surface; **nectaries** = calyx lobes on upper surface at base, conic, 0.2–0.25 mm long, green, producing thin nectar; **stamens** in range mostly 6–8 in 2 close series, free; filaments ascending, slender, ca. 2 mm long, white, short-villous below midpoint; anthers basifixed, dithecal, ca. 0.35 mm long, pale cream-colored, longitudinally dehiscent; pollen pale cream-colored; pistil absent. **Pistillate flower:** radial, ca. 3 mm across; **calyx** deeply 4–5-lobed, fused only at base; lobes suberect to erect, equal or 1 lobe shorter, oblanceolate, mostly 3–3.5 mm long, green, somewhat thickened above midpoint, exposed surfaces stellate-pubescent; **petals** absent; **stamens** absent; **nectaries** absent; **pistil** 1; ovary superior, broadly ellipsoid to biconvex becoming somewhat 4-sided, 1.3–2 × 1–1.3 mm, greenish, densely stellate-pubescent, 1-chambered with 1 ovule; styles 2, ascending later spreading, 1–1.2 mm long, whitish, 2-forked below midpoint, with small stellate hairs except on stigmatic surfaces. **Fruit:** capsule, 2-valved splitting downward into 4 segments, 1-seeded, ovoid before dehiscent

weakly 4-angled, 3.6–4.2 mm long, at maturity greenish and inner fruit tan, stellate-pubescent, with persistent styles and calyx. **Seed:** with fleshy appendage (caruncle, “arillate”) covering top of seed; seed body broadly elliptic to nearly circular in outline and slightly compressed front-to-back, 2.7–3.2 × 2.2–2.5 mm, relatively solid to mottled, olive or olive-brown to gray or darker and if mottled sometimes light brown with black, with lengthwise line on face with caruncle, other face rounder and minutely textured (netlike); caruncle broadly inverted heart-shaped, 0.6 × 1 mm, fleshy, whitish, persistent on dry seed.  
A. C. Gibson