

Vascular Plants of Williamson County

Croton lindheimerianus var. *lindheimerianus* – THREESEED CROTON [Euphorbiaceae]

Croton lindheimerianus Scheele var. *lindheimerianus*, THREESEED CROTON. Annual, taprooted, 1–several-stemmed at base, not rosettes, with spreading principal branches, in range 10–25 cm tall; monoecious; shoots with only cauline leaves, densely stellate-tomentose with arms of hair unequal. **Stems:** cylindrical, to 3 mm diameter above thickening at root, tough, green densely covered by stellate hairs aging with light brown periderm on lower plant and most hairs absent. **Leaves:** helically alternate, simple, petiolate, with rudimentary stipules; stipules 2, attached to stem at node, inconspicuous among stellate hairs; petiole cylindrical, in range 5–10 mm long, < blade, lacking extrafloral nectary glands at top, densely stellate-hairy; blade broadly ovate (suborbiculate), in range < 25 × 16 mm, rounded at base, entire, rounded to obtuse at tip, pinnately veined with a pair of lateral veins close to base with principal veins slightly sunken on upper surface and raised on lower surface, upper surface green having less dense stellate hairs than grayish lower surface with tan principal veins. **Inflorescence:** raceme, flowers helically alternate with 1–3 pistillate flowers at base and 3–9 staminate flowers above, bracteate, stellate-pubescent; raceme in range to 10 mm long, having basal stubs of pedicels for staminate flowers, whitish densely coated with stellate hairs; bractlet subtending pedicels of pistillate and staminate flowers, ascending to spreading, linear and slender, ca. 1–1.5 mm long, green aging red, stellate-hairy with radiating arms to 0.25 mm long, often persisting after staminate flower abscises; pedicel of pistillate flower cylindrical, at anthesis 4–4.5 mm long and spreading increasing 2× and decurved in fruit (drooping), of staminate flower ascending, ca. 1 mm long, whitish, densely stellate hairy; receptacle of staminate flowers villous. **Staminate flower:** radial, 2.5–3 mm across; **sepals** (4–)5, whorled, spreading, acute-ovate slightly cupped, 0.9–1.2 × 0.4–0.6 mm, green with narrow membranous margin, 3-veined at base, upper surface glabrous, lower (outer) surface stellate-hairy; **petals** (4–)5, alternate with sepals, ascending to spreading, obovate-oblong to nearly elliptic, 0.8–1.5 × 0.35–0.4 mm, 1-veined, white with green midvein, thin, finely ciliate on margins villous-ciliate from the base and short-villous ciliate above midpoint, upper surface in range with villous hairs at the base, lower surface glabrous; **nectary glands** 5, at bases of sepals, ± rectangular, 0.1 × 0.2 mm, white; **stamens** (5–)7–12 in 1–2 whorls, free; filaments of outer whorl ± appressed of petals, of inner whorl ascending, 1–2.1 mm long, white, often somewhat flattened front-to-back with short-villous hairs approaching base; anthers dorsifixed, dithecal, 0.3–0.4 mm long, cream-colored, longitudinally dehiscent; pollen cream-colored; **pistil** absent, flower center densely soft-hairy. **Pistillate flower:** radial, 2.5–3 mm across; **sepals** 5(–6), whorled, ascending to widely spreading from expanded receptacle, equal, acute-obovate slightly cupped, at anthesis 1.5–3 × 1–2 mm increasing to 4–4.5 mm long and conspicuously cupped in fruit, green, entire, with a slightly raised midvein on lower surface, upper surface glabrous to below midpoint and stellate-hairy above midpoint, lower surface densely stellate-hairy base-to-tip; **petals** absent; **stamens** absent; **nectary** of flattened glands at bases of sepals (opposite), subtruncate or scarcely notched to semicircular, 0.3–0.45 × 0.6 mm, colorless, somewhat fleshy, appressed and aging dry between sepals and fruit wall; **pistil** 1, densely stellate-hairy; ovary superior, spheric (weakly 3-lobed), 1.2–1.5 mm, whitish, densely covered

with stellate hairs, 3-chambered, each chamber with 1 ovule; styles 3 fused at base, each deeply 2-forked below midpoint, ca. 1.3–1.5 mm long, whitish, the branches spreading and papillate on upper side but stellate-hairy on lower side. **Fruit:** schizocarpic capsule, 3-seeded, 6-valved, slightly 6-sided, 4.5–5 × 3.5–4 mm, lobes often inconspicuous marked by faint ribs (lines of dehiscence), at splitting outer pericarp light yellow-green uniformly covered with stellate hairs, also with minute, inconspicuous, colorless, widely spaced glandular hairs beneath stellate hairs; stellate outer pericarp dehiscent from base upward along 6 lines, inner pericarp tan and splitting into 3 3-sided, 1-seeded mericarps separating from the 3-angled central post, inner flat faces of each mericarp (partially covering chamber) papery and tan; persistent styles branches aging reddish; central column slender with 3 sharp projections at top. **Seed:** with fleshy appendage (caruncle), ± hemi-ellipsoid mildly 3-sided (beetlelike), ca. 3.2 × 2.2 × 1.3–1.5 mm, glossy mottled brown and black or also with pale brown, slightly roughened, rounded on back and ± flat on other faces separated by a fine furrow; caruncle covering hilum end kidney-shaped and fleshy, 0.6–0.7 × 1 × 0.5 mm, translucent drying white, notched on face with furrow; sepals obovate.

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