

Vascular Plants of Williamson County

Acalypha ostryifolia – HOP-HORNBEAM COPPERLEAF, ROUGHPOD COPPERLEAF
[Euphorbiaceae]

Acalypha ostryifolia Ridd., HOP-HORNBEAM COPPERLEAF, ROUGHPOD COPPERLEAF.

Annual, taprooted, not rosetted, 1–several-stemmed at base, with spreading to ascending lateral branches from each node, in range to 50 cm tall; monoecious; shoots with only cauline leaves, leaves often widely spaced, pubescent, on axes mostly with short, often arching hairs and scattered, straight glandular hairs; latex colorless. **Stems:** angled aging cylindrical or strongly ridged, to 5 mm diameter, where ridged with 1 ridge descending from each leaf, internodes to 115 mm long, short-hairy and with scattered glandular hairs especially near the node and within inflorescence. **Leaves:** helically alternate, simple, petiolate, with stipules; stipules 2, attached at node below petiole, acuminate with broad base, 0.7–1.9 mm long, stiff-ciliate below midpoint; petiole ± cylindrical, 15–80 mm long, with narrow stripes on upper side, short-hairy with longer hairs and scattered glandular hairs or numerous glandular hairs approaching blade; blade ovate to ovate-elliptic, < 30–105 × < 18–62 mm, narrowly cordate at base, conspicuously serrate on margins with teeth slightly overlapping, acute at tip, palmately veined at base with 7–17 veins from top of petiole and pinnately veined above with principal veins slight raised on upper surface and raised on lower surface, veins pale or sometimes purplish, often having a small appendage between teeth from the end of vein, upper surface villous and short-villous with widely scattered hairs, lower surface short-villous, tissue containing crystal aggregates (backlit). **Inflorescences:** unisexual or sometimes 1 pistillate flower at base of staminate inflorescence, pistillate inflorescence terminal, staminate inflorescences axillary of the uppermost leaves on a shoot below terminal pistillate inflorescence. **Staminate inflorescence:** narrow spike, narrowly cylindrical, ca. 7 × 1.5–2 mm diameter, many-flowered, flowers helically alternate densely packed except at base and ⊥ rachis, bracteate; peduncle to 7 × 0.6 mm, flexible, light green, densely short-hairy; bractlet subtending flower acuminate to triangular, to 1.3 mm long, green but colorless at base, sometimes > anthers in bud. **Staminate flower:** radial, ca. 1 mm across; **sepals** absent; **petals** linear, ca. 0.5 mm long, whitish, difficult to recognize; **stamens** 8 or more, fused at base into short column having different ages; filaments threadlike, to 0.5 mm long, colorless; anthers dorsifixed, dithecal, 0.35–0.45 mm wide, width > length, greenish aging greenish yellow, each anther 4-lobed, longitudinally dehiscent; pollen yellowish to whitish; **pistil** absent. **Pistillate inflorescence:** spike, 20+-flowered, flowers helically alternate, bracteate; peduncle short; rachis with spaces to 1.2 mm between flowers, villous-hirsute; bractlet subtending pistillate flower, sheathing, fan-shaped in outline with 13–17 narrowly triangular lobes above midblade, 1.5–3 mm long increasing to 4–6 mm long in fruit, with 1 raised vein per lobe, sheath and lower lobes with straight glandular hairs on outer (lower) surface and lobes having minute, yellowish sessile glands on margins. **Pistillate flower:** of pistillate inflorescence, radial, 1–1.5 mm across; **sepals** 3, acuminate, 0.5–0.6 mm long, colorless; **petals** 3, ovate, 0.7 × 0.35 mm, with green midvein, short-ciliate on margins, persistent beneath capsule; **stamens** absent; **pistil** 1; ovary superior, hidden 3-lobed covered by fleshy, fingerlike projections, ca. 0.5 mm across, yellow-green, projections covered with minute sessile glands, 3-chambered, each chamber with 1 ovule; styles 3, to 2.5 mm long, lower portion green with short hairs, glandular hairs, and sessile glands,

below midpoint having unequal, often 3, threadlike, white stigmatic branches. **Fruit:** capsule, schizocarpic as 3 mericarps, (2–)3-seeded, conspicuously 3-lobed, ca. 2.5×4 mm, golden brown at maturity, glabrous at base above having hairs with fleshy bases and short hairs, mericarp 1-seeded, with fleshy projections from below midpoint and short-hairy on roughed back; persistent bractlet ensheathing capsule, ascending, fan-shaped with 13–17 teeth, to 6 mm long, greenish to midblade with green acuminate lobes, principal veins raised on back, short-hairy. **Seed:** with fleshy, aril-like caruncle, ovoid, $1.7\text{--}2 \times 1.4\text{--}1.6$ mm, with gray or brownish papery cover concealing surface ornamentation netlike on black seed coat; caruncle conspicuously keeled, narrowly triangular in outline, ca. $1.2 \times 0.4\text{--}0.5$ mm, whitish.

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