

Vascular Plants of Williamson County
Stillingia sylvatica – QUEEN’S DELIGHT [Euphorbiaceae]

Stillingia sylvatica L., QUEEN’S DELIGHT. Perennial herb, many-stemmed at base, with unbranched spring shoots arising from belowground, with 2–5 ascending branches arising in a pseudowhorl below the first terminal inflorescence and 1–3 ascending branches arising in a pseudowhorl below the diminutive second terminal inflorescence, in range to 80 cm tall; monoecious; shoots with only cauline leaves, appearing glabrous; latex milky. **Stems:** cylindric, to 6 mm diameter, with ridge from each leaf descending ca. half internode, tough, yellow-green, periderm at base dull brown. **Leaves:** helically alternate to subopposite (pseudowhorled), simple, petiolate, with stipules; stipules 2, attached to leaf base, each a 2–3-branched structure having bulbous base and fingerlike upper portion, to 1.5 mm long, red aging blackish; petiole broadly and shallowly channeled, to 3.5 mm long, light green; blade elliptic to narrowly obovate or lanceolate, < 25–65 × < 8–20 mm (on the lowest leaves 5 × 3.5 mm increasing upward), tapered at base, regularly short-serrate on margins with minute puberulent hairs and having minute, red conic point on tooth, acute at tip, pinnately veined with midrib raised on upper and lower surface and other principal veins raised slightly on lower surface, on margin at base of blade minute, fingerlike glandular bodies. **Inflorescence:** spikelike, terminal, initially inflorescence above pseudowhorl of 2–5 ascending branches, 80–122 mm long, all staminate with unexpanded, short, lateral cymes having staminate flowers or sometimes with pistillate flower at base, second set of “spikes” terminal on ascending shoots of pseudowhorl, with 1–5 pistillate flowers at base below unexpanded lateral cymes of staminate flowers; bractlet subtending pistillate flower with (1–)2 lateral, saucerlike glands (stipules) of the bractlet, bractlet appressed to ovary, cupped-broadly ovate, ca. 1.5 × 2.2 mm, yellow-green, margin minutely wavy and irregular low teeth above midpoint and acute at tip, gland stout-stalked (1 mm long), elongate saucerlike, 0.7 × 2–2.3 × 1.5–1.6 mm, yellow-green. **Staminate inflorescence:** initial spike having to 90 lateral cymes, cymes irregularly spaced along rachis, of (0–)2 staminate flowers on lower half and a cyme of sterile structures on upper half; peduncle short below the lowest cyme; rachis strongly ridged; bract subtending staminate cyme bracketed by 2 lateral, saucerlike glands (stipules) of the bract, bract appressed to cyme, broadly triangular, ca. 3 mm across, irregularly low-toothed and jagged on margins, gland stout-stalked, mortar-shaped, initially < 1 mm enlarging with depressed center to 1.3 mm and saucer-shaped, yellow-green; upper cluster of < 10 club-shaped structures, 1 mm long, flesh-colored. **Staminate flower:** at anthesis 1.5 mm across, ca. 3 mm across with ascending stamens; **calyx (perianth)** broadly funnel-shaped, 1 mm long, greenish, irregularly low-toothed and jagged on margin; **stamens** 2, free; filaments 1.5–2 mm long, crimson; anthers basifixed, strongly dithecal, 0.5 mm long, in bud yellow-green maturing yellowish, longitudinally dehiscent; pollen pale yellow; **pistil** absent. **Pistillate flower:** **calyx (perianth)** appressed to sides of ovary, roundish to obovate, 1.2–1.3 mm, colorless tissue with green veins, margins jagged having short point at tip; **stamens** absent; **pistil** 1; ovary superior, 3-lobed, at anthesis 1.6 × 2 mm, green, glabrous but with fleshy red hairs at base, 3-chambered, each chamber with 1 ovule; style lower portion columnar, 1.3–1.5 mm, 0.9 mm diameter at base tapered upward to 0.65 mm diameter, green, 3-branched,

the branches scorpioid ascending then coiled downward, red on outer surface and purple on papillate inner surface. **Fruit:** capsule in clusters of (1–)4–5, loculicidal, (2–)3-seeded, 3-lobed, 8.5–10 × 9–13 mm, glabrous. **Seed:** with fleshy aril (caruncle), capsule subspheroid, 5.5–8 × 5.5–6.5 mm, 4-sided, gray on rounded large back and 2 inner faces flat or somewhat flattened along brown median line, whitish on slanted face with caruncle, gray portion textured and ± cobblestonelike; caruncle covering one end of seed, 3.5 × 4.5 mm, off-white, 1 mm thick.

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