

Vascular Plants of Williamson County

Euphorbia hypericifolia – TROPICAL EUPHORBIA [Euphorbiaceae]

Euphorbia hypericifolia L., TROPICAL EUPHORBIA. Annual, taprooted. 1-stemmed at base, not rosetted, with ascending branches diverging at 45°, 1 branch per node, in range to 35 cm tall; monoecious; shoots with only cauline leaves, glabrous and somewhat glaucous; latex white, copious. **Stems:** cylindric, to 3 mm diameter, tough, green and lightly glaucous or reddish on sun-exposed side; old stem with fissured periderm. **Leaves:** opposite decussate, simple, short-petiolate, with stipules; stipules 2 per leaf (4 per node), attached to stem along node next to stipule of adjacent leaf (not fused), deltate to triangular, 0.5–2 mm long, often red (at least above midpoint), sometimes jagged; petiole cylindric, 2–2.5 mm long, curved to orient leaves, often tinged reddish; blade ± elliptic, symmetric (not sickle-shaped), 5–27 × (2.5–)4–11 mm, oblique at base, low-serrate and reddish on margins, obtuse to acute at tip, ± palmately veined with 3 principal veins raised somewhat on lower surface, upper surface dull green, lower surface paler and glaucous sometimes tinged purple-red (especially principal veins). **Inflorescence:** cyathium (= involucre with staminate flowers and 1 pistillate flower), axillary on short branches with dense cymelike arrays, branches < 20 mm long with 25+ cyathia and 5–8 mm across, bracteate, glabrous; peduncle cylindric, to 15 mm long, with 2 diverging branches at top; bract subtending lateral branch leaflike with short petiole but smaller, with triangular stipules often fused at base across node, bracts decreasing upward subtending successive forks, bracts within cluster sessile, narrowly oblong to acuminate, < 2 mm long, variegated with white tissue and green veins, entire or with several minute teeth approaching tip; **involucre** inversely conic, at anthesis ± 1 × 0.6 mm, green, white on margins and below glands, externally glabrous, internally with several short hairs below glands, with 5 bracts and 4 glands, the bracts of involucre fused most of length, acute to acuminate and fringed, at free tips 0.4–0.5 mm long and white, the glands alternate with bracts (1 absent), nectar-producing (large droplet covering glands at midday), raised, transversely roundish, 0.25–0.35 mm, fleshy, dull yellowish green, appendaged below gland, the appendage petal-like, > gland, roundish to obovate and unequal on each cyathium, 0.4–1.2 × 0.4–1 mm, white, entire; staminate flowers mostly 5–10 in 5 clusters of 1–2, each with pedicel-like stalk, each cluster associated with a bractlet; bractlet threadlike, to 0.5 mm long, white; pistillate flower on a pedicel-like stalk (gynophore), protogynous, at anthesis gynophore short and erect, with most of ovary exposed, soon after gynophore elongating to 2 mm long and becoming recurved with maturing ovary exerted 1 mm, weakly 3-lobed at base of ovary. **Staminate flower:** reduced to 1 stamen; filaments ca. 1.5 mm long, white; anthers exerted sequentially (to 7 at the same time) < 1 mm beyond orifice, basifixed, conspicuously dithecal, sacs diverging, each sac spheroid, ca. 0.25 mm long, dark red or with pale yellow, longitudinally dehiscent; pollen light yellow. **Pistillate flower:** ovary superior, 3-lobed, ± 0.7 × 0.7 mm, green lacking red, glabrous, 3-chambered, each chamber with 1 ovule; styles 3, ascending aging spreading, 0.5–0.6 mm long, whitish aging greenish or green never red or reddish, 2-branched at midpoint; stigmas minute. **Fruit:** capsule, 3-seeded, 3-lobed, 1.6–1.8 × 1.6–1.8 mm, often aging purple-red, glabrous, elastically dehiscent along septa and chambers into 6 dry valves and expelling seeds. **Seed:** quadrangular-

ovoid, ca. $1 \times 0.5-0.6$ mm, reddish brown beneath lightly frosty epidermis, having 4 edges, slightly transversely wrinkled and dimpled, not noticeably grooved on obtuse, lower ridge; oily when poked.

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