Vascular Plants of Williamson County Euphorbia spathulata – WARTY SPURGE, RETICULATE-SEEDED SPURGE [Euphorbiaceae]

Euphorbia spathulata Lam., WARTY SPURGE, RETICULATE-SEEDED SPURGE. Annual, taprooted, not rosetted, 1-several-stemmed at base, \pm erect, 15–40 cm tall; monoecious; shoots glabrous; latex white, copious. **Stems:** cylindric, < 2 mm in diameter, purplish red. Leaves: helically alternate, simple, short-petiolate below and sessile above, without stipules; petiole < 0.5 mm long, the longest narrowly winged and indistinct from base of blade; blade symmetric, spatulate or obovate to oblanceolate, $5-20 \times 3.5-6$ mm, tapered at base (petiolate leaves), low-serrate on margins especially above midpoint, obtuse to obscurely notched at tip, pinnately veined with midrib somewhat raised on lower surface, green and glaucous with bluish cast, sometimes reddish on margins. Inflorescence: cyathium (= involucre with staminate flowers and 1 pistillate flower), terminal and axillary in leafy, cymelike arrays, terminal array typically 3-branched below a terminal cyathium with each branch typically 2-branched below the subsequent terminal cyathium, the lateral cymes 1-branched or 2-branched below a terminal cyathium; bracts subtending cyathium leaflike, ovate to deltate, $3.2-9.5 \times 3.1-6$ mm, typically opposite but 3-whorled subtending terminal cyathium; peduncle 3–16 mm long; cyathium \pm 1.5 mm across (including spreading glands); **involucre** bell-shaped to inversely conic, $\pm 0.7 \times 0.7$ mm, green, of 5 bracts and 4 glands, the bracts of involucre fused most of length, with tonguelike to rounded triangular tips 0.15-0.3 mm long bent inward and \pm ciliate on margins, the glands alternate with bracts (1 absent), nectar-producing, raised, oblong to elliptic, $0.35-0.6 \times$ 0.2–0.3 mm, fleshy, greenish yellow, without appendages; staminate flowers 5, never in clusters, stalked, each associated with a bractlet; bractlet threadlike, white, the pedicel 0.5–1 mm long; pistillate flower on a pedicel-like stalk (gynophore), at anthesis gynophore erect and ca. 0.7 mm long increasing to > cyathium in fruit, with styles initially exposed from involucre, soon gynophore elongating and having mature ovary fully exserted and becoming thicker. Staminate flower: reduced to 1 stamen; filament 0.2–0.5 mm long, light yellow, expanded at base; anthers conspicuously dithecal, each sac ellipsoid, $\pm 0.25 \times$ 0.2 mm, vivid yellow, longitudinally dehiscent; pollen yellow. Pistillate flower: reduced to 1 pistil; ovary superior, 3-lobed ovoid, ± 0.6 mm wide, green, conspicuously warty, glabrous, 3-chambered, each chamber with 1 ovule; styles 3, 0.8–1.3 mm long, green, 2branched at midpoint; stigmas minute, greenish yellow. Fruit: capsule, 3-seeded, 3-lobed subspheroid, 2.5×3.2 mm, glabrous, elastically dehiscing along septa and chambers into 6 dry valves (some valve-pairs remaining attached at base) and expelling seeds. conspicuously warty, the warts domed and finely pebbled. Seed: with caruncle at attachment, ovoid to ellipsoid, typically $1.7-1.8 \times 1.5$ mm, brown to yellowish brown, with a medial ridge on upper and lower faces and low, loosely netted ridges on other faces, the ridges light tan to light gray; caruncle versatile on oblique end of seed by a very short stalk, mushroom-shaped, 0.4–0.6 mm across, whitish drying yellowish, firm, often persistent.

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