## Vascular Plants of Williamson County

*Euphorbia cyathophora* – PAINTED SPURGE, WILD POINSETTIA, FIRE-ON-THE-MOUNTAIN, PAINTEDLEAF, DWARF POINSETTIA [Euphorbiaceae]

Euphorbia cyathophora Murray, PAINTED SPURGE, WILD POINSETTIA, FIRE-ON-THE-MOUNTAIN, PAINTEDLEAF, DWARF POINSETTIA. Annual, taprooted, not rosetted, 1(-3)stemmed at base,  $\pm$  erect to ascending with individual, slender, ascending axillary branches from successive nodes along main axis, in range to 60 cm tall; monoecious; shoots glabrous or wide foliage sparsely short-hairy (also axillary bud); latex white, copious. Stems: initially with shallow furrow aging cylindric and tough, to 2 mm in diameter, green often purple-red, smooth or individuals sometimes papillate. Leaves: helically alternate but in canopy opposite subtending an inflorescence, simple, petiolate, with stipules; stipules 2, attached to leaf base, conic and glandular, 0.2–0.25 mm long, red or greenish; petiole not channeled compressed top-to-bottom or hemi-cylindric (wide leaves),  $< 3-8 \times 1$  mm, green with whitish midvein, glabrous (sparsely short-hairy); blade polymorphic, flat, on some individuals only linear, on other individuals lanceolate or ovate to elliptic or 4-lobed obovate with a pair of midblade sinuses, in range  $25-135 \times 1-35+$ mm, > petiole, tapered at base, mostly entire or lobed, acute at tip, pinnately veined, with linear blades with only midrib conspicuous raised on lower surface, of wide blades tapered at base, entire to lobed with irregular serrate teeth and minute glandular tips on margins, principal veins principal veins with midrib raised on lower surface, upper surface glabrescent to glabrous, lower surface sparsely evenly short-hairs but veins not ending in teeth. Inflorescence: cyathium (= involucre with staminate flowers and 1 pistillate flower), terminal in cymelike arrays, terminal array typically 3-branched subtended by a pseudowhorl of 3-4 leaflike, short-petiolate bracts, upper bracts subtending cyathia acuminate and < 1 mm long; peduncle beneath cyathium 1.5 mm long increasing to 2.5–3 mm long in fruit; **involucre** cylindric-narrowly bell-shaped, at anthesis  $2 \times 1.2 - 1.6$  mm, light yellow-green, of 5 bracts and 1(-2 or 3) lateral glands (2–3 glands = the first, central cyathium of an inflorescence), the bracts of involucre fused most of length, free portion handlike 0.5–0.7 mm, green, and fringed with 3–5 lobes, the gland nectar-producing, short-stalked ca. 0.3 mm long, deeply cupped and compressed semicircular in outline, to  $0.9 \times 1.3$  mm, green, without appendages; staminate flowers to 20 in 5 clusters, each cluster associated with a bractlet; bractlet axis flattened with slender branches and fringed above midpoint, to 15 mm long, colorless; pistillate flower on a pedicel-like stalk (gynophore), at anthesis gynophore erect and ca. 1.3 mm long increasing to 4–5 mm long and > cyathium in fruit, with styles initially exposed from involucre, soon gynophore elongating and ascending or bent sideways and having mature ovary fully exserted and becoming thicker. Staminate flower: reduced to 1 stamen; filament 1.5–3 mm long, in each cluster elongating successively, white, with abscission constriction 1/3 to 1/2 from top; anthers conspicuously dithecal, each sac ellipsoid, 0.3–0.4 mm long, light yellow, longitudinally dehiscent; pollen light yellow. **Pistillate flower:** reduced to 1 pistil; ovary superior, 3-lobed ovoid,  $1 \times 1$  mm, light green and glaucous, glabrous, 3-chambered, each chamber with 1 ovule; styles 3 fused at base, to 1.6 mm long, at anthesis spreading and pale yellow-green, 2-branched at or above midpoint. Fruit: schizocarp (capsule), 3seeded, conspicuously 3-lobed, in range  $2.8-3.2 \times 4.0-4.5$  mm, green sometimes blushed

rose-red), glabrous, elastically dehiscing into 3 segments; style persistent, with 3-ribbed central axis (columella) 2.3-2.5 mm long. **Seed:** in range lacking caruncle, ovoid flat on base, in range  $2-2.3 \times 1.6-2$  mm, dull dark brown to black, minutely textured and low bumps (warty, tuberculate), with a faint ridge line from the base of seed to tip/A. C. Gibson