Vascular Plants of Williamson County Euphorbia nutans – EYEBANE [Euphorbiaceae]

Euphorbia nutans Lag., EYEBANE. Annual, taprooted. 1-several(-many)-stemmed at base, not rosetted, with ascending to spreading (procumbent) branches often diverging at 45°, 1 branch per node, in range to 55 cm tall; shoots with only cauline leaves, glaucous; latex white, copious. Stems: cylindric, to 5 mm diameter, tough, green and glaucous or reddish on sun-exposed side, in canopy internodes often rose-red, stem internodes to 55 mm long, with 2 broad lines of arching short hairs descending from leaves at each node, along node with many multicellular glandular hairs with burgundy heads. 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 and mostly fused, deltate (fused), 2-lobed, or fringelike, 1–1.2 mm long, reddish at base and whitish above, jagged and short-ciliate; petiole flattish on upper side, 1–2 mm long, light green, curved to orient leaves, glabrous; blade oblong or oblong-lanceolate to lanceolate or narrowly lanceolate, asymmetric and often \pm sickle-shaped, (6–)12–38 × 4–10 mm, oblique and half-cordate at base, regularly servate and purplish red (to midblade) on margins, obtuse to acute at tip, \pm palmately veined 5-6-veined with midrib not centered and 3 principal veins raised somewhat on lower surface, upper surface often sparsely short hairy or with scattered pilose hairs near base, upper surface sometimes with purplish red blotch to midpoint or white or pale green tissue above midblade along midrib; lower surface paler, glabrous and conspicuously glaucous. **Inflorescence:** cyathium (= involucre with staminate flowers and 1 pistillate flower), axillary on branches solitary or in a somewhat condensed cymelike array at tip, bracteate, glabrous; peduncle cylindric, at anthesis < 2 mm long increasing $3 \times$ in fruit; bract subtending lateral branch leaflike with short petiole but smaller, to 12 mm long, having colorless glandular bodies in axil, with triangular and fringed, whitish stipules mostly 2 per side (not fused), bracts decreasing upward subtending successive forks, bracts within cluster with petiole and slender, whitish stipules, narrowly oblanceolate, at the lowest fork to < 2 mm long, variegated with white tissue and green veins, with several minute teeth or linear and entire approaching tip; stalk of cyathium at anthesis 1.5 mm long with pubescent line; **involucre** inversely conic, at anthesis narrowly bell-shaped, $1.2-1.5 \times$ 0.7–1 mm, light yellowish green but often tinged reddish on exposed side and somewhat glaucous, white on margins and below glands, externally glabrous, internally with many 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 mm long and white, the glands unequal, alternate with bracts (1 absent), short-stalked, nectar-producing (large droplet covering glands at midday), raised, transversely roundish to elliptic and slightly depressed, 0.15–0.4 mm, fleshy, dull light green or tinged reddish, appendaged below gland, the appendage petal-like, > gland, roundish to obovate or fan-shaped and unequal on each cyathium, $0.25-0.6 \times 0.25-0.65$ mm, white, entire or the largest appendage sometimes slightly scalloped on outer margin; staminate flowers mostly to 25 in 5 clusters, to 5 in each cluster and with pedicel-like stalk, each cluster associated with a bractlet; bractlet slender to midpoint and fringed and short-hairy above midpoint, to 1 mm long, white; pistillate flower on a pedicel-like stalk (gynophore), protogynous, at anthesis gynophore short and erect with none of ovary exposed (style arising from top), soon after gynophore elongating to 2 mm long and becoming arching with maturing ovary exserted. Staminate

flower: reduced to 1 stamen; filaments (including pedicel) to 1.8 mm long, white; anthers exserted sequentially < 1 mm beyond orifice, basifixed, conspicuously dithecal, sacs diverging, each sac spheroid, 0.25-0.3 mm long, cream-colored or light yellow aging pinkish, longitudinally dehiscent; pollen pale yellow. **Pistillate flower:** proterogynous; ovary superior, 3-lobed, $0.7-1 \times 0.7-1$ mm, green lacking red, glabrous, 3-chambered, each chamber with 1 ovule; styles 3, ascending aging spreading, ca. 0.7 mm long, cream-white or light green aging darker and never red or reddish, fused to 0.25 mm from base, 2-branched at midpoint; stigmas terminal and minute. **Fruit:** capsule, 3-seeded, 3-sided and 3-lobed, $1.6-2.2 \times 2-2.3$ mm, often aging reddish or purple-red, glabrous, elastically dehiscing along septa and chambers into 3 dry segments expelling seeds. **Seed:** lacking a fleshy caruncle (aril) over hilum; quadrangular-ovoid, $1.2-1.4 \times 0.6-0.8$ mm, blackish brown, minutely beaded, having 3 or 4 edges, having non-straight, low cross ridges with pits between edges on each face.

A. C. Gibson