Vascular Plants of Williamson County Boehmeria cylindrica – BOG-HEMP, SMALL-SPIKE FALSE NETTLE, BUTTON-HEMP [Urticaceae]

Boehmeria cylindrica (L.) Swartz, SMALL-SPIKE FALSE NETTLE, BOG-HEMP, BUTTON-HEMP. Perennial herb. rhizomatous, fibrous-rooted, several-stemmed at base, erect, in range mostly < 50 cm tall; in range monoecious; shoots with only cauline leaves, lacking stinging hairs, sparsely stiff short-hairy and longer hairs with swollen bases. Stems: 4-lobed aging squarish with rounded edges, tough, green. Leaves: opposite decussate (subopposite), simple, petiolate, with stipules; stipules 2, attached to stem at nodes subtending inflorescence, membranous, lanceolate, $2.5-3 \times 1$ mm, acute to acuminate at tip, aging reddish, midvein raised on lower surface, glabrous; petiole channeled, in range < 20 mm long, < 2 mm diameter, tough, whitish, short-strigose with upward-pointing hairs; blade ovate, $< 20-70 + \times < 19-45 + \text{ mm}$, in range ± equal at each node, ± truncate at base, serrate with blunt teeth and short-ciliate on margins, acute to acuminate at tip, 3-veined at base with principal veins sunken on upper surface and raised on lower surface, principal veins ending in teeth, the teeth acute to obtuse and slightly overlapped at base, upper surface with abundant tiny dots (internal, rounded cystolysts), lower surface with pale green to greenish white veins. Inflorescence: spikelike, axillary, spreading to ascending, interrupted having paired condensed, sessile cymes at nodes along rachis, having staminate flowers but mostly pistillate flowers at 4+ nodes, axis at least 15 mm long, often with pair of diminutive bracts (leaves) subtending terminal pair of cymes, flowers mostly sessile; bractlet of pistillate flower \pm appressed to edge of calvx, obovate, 0.25–0.4 mm long, short-hairy. Staminate flower: radial, ca. 4 mm across (spreading stamens); bud strongly 4-lobed, 1.3 mm across; calyx 4-lobed, tube 0.15–0.2 mm long; lobes ovate and hoodlike, 1–1.2 mm long, pale green, with lobes cupped to hold each anther in bud, 1-veined but not to tip, having short, hooked hairs (uncinate) especially on margins and shorter straight hairs, hairs mostly above midpoint; stamens 4, free; filaments gradually tapered from base and abruptly narrow approaching anther, 1.7–1.9 mm long, colorless, in bud looped (inflexed) released suddenly and widely spreading; anthers basifixed, dorsifixed, 0.7-0.8 mm long, white, longitudinally dehiscent; pollen white; pistil sterile, whitish dome compressed side-to-side. Pistillate flower: bilateral, ca. 0.5 mm across; calvx of fused faces minutely 4-toothed, appressed and fused to ovary, flattened and obovate (flaskshaped), at anthesis 0.6–1 mm long increasing to 2× in fruit, having short hooked hairs (hook upward) and shorter straight hairs; stamens fertile stamens and staminodes absent; **pistil** 1; ovary superior, enclosed by calyx, 1-chambered with 1 ovule; style colorless aging reddish, persistent within calyx; stigma exserted from calyx, linear, colorless, hairy. Fruit: achene completely enclosed by calyx, in outline achene appearing like an expanded seed chamber; calyx diamond-shaped or obovate to broadly elliptic, in range ca. $1-1.5 \times 1$ mm, green, with bulging outline of achene ovate to above midpoint, above calyx midpoint with short hairs on faces and upward-hooked hairs along edges. A. C. Gibson