

Vascular Plants of Williamson County
Eryngium hookeri – HOOKER ERYNGO [Apiaceae]

Eryngium hookeri Walp., HOOKER ERYNGO. Annual, sclerophyllous (tough) and spinescent in canopy, fibrous-rooted, not-rosetted, 1-stemmed at base, in range to 90 cm tall; shoot with only cauline leaves at flowering, glabrous. **Stems:** strongly ridged, to 8 mm diameter, tough, green with whitish ridges but lower stem aging white and cylindric, internodes to 100 mm long. **Leaves:** helically alternate, the lower leaves petiole = sheath nearly fully sheathing node, palmately 3-lobed from top of sheath with an enlarged central lobe and diminutive lateral lobes, without stipules; sheath to 30 mm long, parallel-veined aging papery and brown; blade generally not spinescent, central lobe appearing stalked, obovate, to 110 × 30 mm, long-tapered at base, serrate on margins, acute at tip, lateral lobes usually 2 but each with sublobes, to 30 mm long, sublobes linear to narrowly oblanceolate, serrate on margins, each lobe with several veins from base raised on lower surface, the principal veins usually with a vein to each principal lobe spine, veins straw-colored or whitish on lower surface. **Inflorescence:** headlike spikes in terminal, open, cymelike array (= canopy), spinescent, at each node 3-forked with a terminal peduncled head and at the base of the peduncle having a pair of unequal flowering shoots, head ± broadly ovoid, at anthesis ca. 11 mm across, ca. 50-flowered, of helically alternate, sessile flowers tightly spaced and with associated, spine-tipped, tough bractlets, and having 1–several ± terminal, erect bractlets 7.5–10 mm long (“coma”); bracts subtending 3-fork 2, at the lowest fork of the inflorescence deeply palmately (5-)7-lobed with sheath < 60 mm long, not sclerophyllous but with somewhat spinose margins, lobes narrowly oblanceolate, green with raised whitish principal veins, upward pair of bract at each node shorter, subsessile to sessile, and with narrower and more sclerophyllous and spinier lobes, of the upper nodes < 20 mm long peduncle stemlike, ca. 12-ridged, at anthesis ca. 15 mm long; **involucre** subtending head of 7–10 radiating and widely spreading bractlets, bractlets spinose along margins, each involucre bractlet sheathing an ovary base of the lowest (earliest) flowers, involucre 40+ mm across, the principal bractlets sclerophyllous, oblong, to 25 mm long, with to 10 spine-teeth (the uppermost involucre bractlet sometime lacking lateral spines), central tissue 2.5–3.5 mm wide, including teeth to 7 mm wide, 3-veined at base forming above a dominant, 3-veined midrib raised on both surfaces, midvein and teeth white, tissue green and glaucous to pale purple; bractlet subtending each sessile flower spreading (lower flowers) to ascending, spine-tipped, the lowest bractlet above the involucre ovate, cupped and spine-tipped with winglike membranous margins to midpoint and ca. 4 mm long, > sepals, increasing gradually to top of spike (coma bractlets to 10 mm long), green or having purplish tissue with pale purple wings cupping ovary, entire (lacking lateral teeth), terminal spine tip to 1.2 mm long and pale purple, upper surface concave or aging flattish, surfaces green to purplish often glaucous with green, the longest coma bractlet with 0–3 lateral teeth. **Flower:** bisexual, radial, ca. 2 mm across; **sepals** 5, at anthesis erect, cupped-ovate slightly keeled and spine-tipped, ± 3 × 0.9–1 mm, lower portion green with white midvein and margins, spine 1–1.2 mm long, white to pale purple, persistent; **petals** 5, ± oval and conspicuously 2-lobed with 4 wings, 1 × 0.5 mm, colorless at base and light pink-purple above midpoint; **stamens** 5, exserted above sepals; filaments in bud coachwhiplike (looping) later ascending, 2.6–3.1 mm long, white at base and exserted portion light pink-purple; anthers dorsifixed, dithecal, ± heart-shaped, 0.8–0.85 ×

0.6 mm, beige or blushed and aging darker, longitudinally dehiscent; pollen colorless; **pistil** 1; ovary inferior, angled wedge-shaped, ca. 2 mm long, covered with white, appressed-ascending, inflated, fleshy hairs (“scales”) short at base increasing to 1 mm long and to 1.7 mm long at top, the scales chiefly along angles, 2-chambered, each chamber with 1 ovule; nectar-producing platform (stylopodium, stylar tissue) 2, kidney-shaped, each $0.7 \times 0.4 \times 0.4$ mm, dark green; styles 2, steeply ascending (narrowly divergent), straight, 2 mm long, colorless at base and pale to light pink-purple above midpoint, with minute stigmas at tips. **Fruit:** schizocarp, of 2 dry 1-seeded halves (mericarps), before splitting wedge-shaped in outline and ca. 2.5×2 mm when covered by dry, inflated hairs (scales) + on top of mericarp having 2 or 3 persistent sepals, a stylopodium, and 1 style; mericarp body widest at midpoint, ca. 2 mm long, dotted on flat surface; scales minutely textured.

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