

Vascular Plants of Williamson County
Zeltnera muhlenbergii – JUNE CENTAURY [Gentianaceae]

Zeltnera muhlenbergii (Hooker) G. Mans., JUNE CENTAURY. Annual, slender-taprooted, not rosetted, 1-stemmed at base, with a branched, terminal inflorescence above midplant forming flat-topped flowering canopy, erect, 13–28 cm tall; shoots with only cauline leaves, suberect to erect aging with margins inrolled to lower (outer) side (revolute), glabrous. **Stems:** 4-ridged and 4-sided, faces flat, < 2 mm diameter, with ridges decumbent from leaf margins (4 per node), internodes to 25 mm long, ridge translucent and winglike to 0.15 mm wide with minute teeth. **Leaves:** opposite decussate, simple, sessile with pair not forming ledges across node, without stipules; blade lanceolate or at the lowest nodes obovate, < 8–25 × 1.5–4(–5) mm, entire with minute domed cells on margins above midblade, acute at tip, faintly pinnately veined with midrib slightly raised on lower surface. **Inflorescence:** compound cyme, terminal, dichasial at the lowest nodes and monochasial on upper portion, many-flowered, flowers subsessile, bracteate, glabrous; bracts subtending cyme and lateral branches in pairs, leaflike, < 12 mm long decreasing upward; peduncle = stem internode; pedicel erect, 4-sided, < 1 mm long not increasing in fruit. **Flower:** bisexual, radial, in range 7–9 mm across; **calyx** 5-lobed, ca. 6 mm long, green, glabrous; tube cup-shaped, 1 mm long; lobes unequal, linear, the longer lobes keeled below midpoint; **corolla** 5-lobed, 11.5–13 mm long; tube membranous, constricted above ovary; tube ribbed and obvious in fruit (ca. 20-ribbed); throat short funnel-shaped, 1.2–1.4 mm across at orifice, white; lobes widely spreading, lanceolate, 3.6–5 × 1 mm, rose, paler on lower surface, often minutely notched at tip or remotely toothed; **stamens** 5, fused to base of corolla throat and decurrent inside upper corolla tube, alternate with corolla lobes, exserted; filaments erect, straight and threadlike, ca. 3 mm long, white, glabrous; anthers basifixed, dithecal, 1.1–1.4 mm long aging twisted 0.6–0.75 mm long, pale yellow, longitudinally dehiscent; pollen light yellow; **pistil** 1, 8–9.5 mm long, exserted; ovary superior, cylindrical, ca. 5 × 0.7–0.8 mm, solid green, 1-chambered and longitudinally grooved over each placenta, the 2 placenta intruding with numerous ovules; style 3 mm long (including stigma lobes), 2-branched, 2-channeled approaching stigma, white below fork, the stigmatic branches oval to roundish, 0.5 mm long, light yellow, papillate. **Fruit:** capsule, septicial, dehiscent by 2 valves, many-seeded, narrowly fusiform, 7.5–8.5 × 1 mm, golden brown, dehiscing below midpoint with tips of valves ± spreading. **Seed:** ovoid, 0.2–0.25 mm long, brown, conspicuously netlike and ridged.

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