

Vascular Plants of Williamson County

Nemastylis geminiflora – PRAIRIE CELESTIAL, PRAIRIE IRIS, CELESTIAL-LILY [Iridaceae]

Nemastylis geminiflora Nutt., PRAIRIE CELESTIAL, PRAIRIE IRIS, CELESTIAL-LILY. Perennial herb, geophytic, fibrous-rooted, 1-stemmed from bulb, to 35 cm tall; shoot with basal leaves and several cauline leaves, foliage pleated with conspicuous folds, glabrous; bulb deep-seated, ovoid. **Stems:** cylindric, < 2 mm diameter, tough. **Leaves:** alternate distichous, simple with sheath; sheath open, > 360°, 50+ mm long, with membranous margins, rounded on back; blade strap-shaped long-tapered to tip, to 420 × 10–11 mm, entire, parallel-veined, upper surface cupped upward, lower surface accordionlike. Inflorescence: cyme, of 1–2 2-flowered branches, each branch with long peduncle, bracteate, glabrous; bract subtending inflorescence leaflike, closed ca. 3 mm at base, to 65 × 7 mm, with membranous margins, long-tapered to tip, parallel-veined; bractlet subtending pedicel = a closed sheath, 30–35 mm long, with 5 parallel green veins; pedicel at anthesis < 40 mm long. **Flower:** bisexual, radial, mostly 34–45 mm across, in face view blue with white eye (center); **tepals** 6 in 2 close whorls, clawed, ± monomorphic, claw wedge-shaped, to 1.5 mm long, glossy white and fleshy, limb widely spreading, ovate, 20–26 × 14–15 mm, of inner whorl slightly shorter, white to 4 mm from claw (white eye) and blue above withering violet-blue, with thickened midvein (= 3 veins) and 10+ veins from base of limb, upper surface with domed cells; **stamens** 3, free; filaments ascending, flattened front-to-back, 2.6–2.9 mm long, glossy white, flared at base ca. 1.4 mm with wing-like margins; anthers dorsifixed near base on inner side, dithecal, 13–15.7 mm long, bright yellow, longitudinally dehiscent, aging twisted; pollen bright yellow, copious; **pistil** 1; ovary inferior, inversely conic, ca. 3.5 × 2–2.2 mm, ± glossy green, smooth, glabrous, 3-chambered, each chamber with many ovules attached to central axis, ovule light yellow above midpoint; style 6-branched, lower portion columnar but deeply 3-lobed, ca. 2 mm long, 3-branched and each 2-forked, the branches sharply bent outward and spreading, the 6 arms somewhat compressed side-to-side at base and enlarged upward after fork, in range 5.5–6 mm long, white having violet stripe on upper side approaching stigma, with 6 terminal stigmas. **Fruit:** capsule, septicial and dehiscent at top, many-seeded, obovoid, 10–20 mm long, with 3 shallow furrows, having seeds in 3 vertical rows. **Seed:** prismatic angular-obovoid, 2–2.5 mm long, dark brown, with beadlike tip.

A. C. Gibson