Vascular Plants of Williamson County

Juncus texanus – TEXAS RUSH [Juncaceae]

Juncus texanus (Engelm.) Cov., TEXAS RUSH. Aquatic perennial herb, densely clonal (monospecific), rhizomatous, fibrous-rooted, not rosetted, erect to suberect (ascending), 25-55 cm tall; shoots with 0-1 catophyll, 0-1 basal leaf, and 3-5 cauline leaves on photosynthetic green stems minutely dotted with vertical lines of stomates, glabrous on entire plant; rhizomes ca. 1.5 mm diameter, node along rhizome and at base of shoot swollen, to 5 mm diameter, and with several-many adventitious roots. Stems: \pm cylindric (elliptic in ×-section), to 2.5 mm diameter; nodes solid and sections of internodes hollow. Leaves: helically alternate, simple with sheath; sheath open, with stomates on surface, having a pair of membranous lobes (auricles) at top aging scarious and brownish, rounded (acute), to 2.5 mm long; blade appearing cylindric but in range conspicuously channeled on upper side, < 100–220 mm long, the longest blades above midplant and ca. 2 mm diameter, channel colorless, at base having a pair of whitish, blisterlike swelling on margins, long-tapered to slender tip, venation obscure, green tissue with rows of stomates. **Inflorescence:** panicle of headlike clusters of alternate flowers, terminal, having to 5 suberect branches, the branches arising from top of stem with axis bases hidden by a sheath of a leaflike bract, the lowest branch having the lowest axis decreasing upward and with short branchlets at top, each head of radiating flowers, the larger heads 10–15 mm across, of several (–16) sessile flowers tightly crowded at bases; bract subtending panicle (flag leaf) with sheath < 10 mm long and auricles acute to 1.5 mm long, blade to 120×1 mm, with conspicuous, whitish blisters at base, bract of second branch shorter with sheath mostly < 4 mm long, shorter auricle, and blade hemicylindric and $< 30 \times 0.6$ mm; bract subtending other branches and branchlets decreasing upward, shorter, papery sheaths, with short auricles, and diminutive, slender blades; axes cylindric, the longest to 40 mm long, decreasing upward, branchlets < 10 mm long; bractlets (bracteoles) subtending flower 2, membranous aging scarious, ovate somewhat keeled with slender point, 2.5–3 mm long including point 1 mm long, 1-veined to point, body appressed to an outer tepal. **Flower:** bisexual, radial, 3-sided, ca. 1 mm across; tepals 6 in 2 whorls, suberect, dimorphic, outer tepals acuminate-lanceolate folded inward from midvein, $3.9-4.5 \times 0.5$ mm, greenish with membranous margins, inner tepals flat narrowly triangular, $3.9-4.5 \times 0.7$ mm, in range $\pm =$ outer tepals, greenish to brownish, persistent around developing fruit; **stamens** 6 in 2 whorls, free, opposite tepals, included; filaments to 0.7 mm long, colorless; anthers below level of stigmas, basifixed, dithecal, 1.6–2 mm long (anther 2–3× filament), pale light yellow to pale green, longitudinally dehiscent; pollen pale light yellow to colorless; **pistil** 1, ca. 4.5 mm long; ovary superior, 3-sided (trigonous) to lanceoloid, $1-1.5 \times 0.4-0.5$ mm, pale green aging colorless, 1-chambered with < 20 ovules; style 3-branched above midpoint, stalk greenish aging colorless, the stigmatic branches initially corkscrewlike with several coils, 3–3.5 mm long and ascending when uncoiled, colorless and papillate along axis. Fruit: capsule, loculicidal, dehiscent by 3-valves with valves separating, tip exserted from perianth, narrowly lanceoloid 3-sided, $5.2-6+\times0.7-1$ mm, chestnut brown. **Seed:** obovoid, \pm 0.5 mm long, yellow-brown, lacking tails. A. C. Gibson