## Vascular Plants of Travis County Cladium mariscus subsp. jamaicense – JAMAICA SAWGRASS [Cyperaceae]

Cladium mariscus (L.) Pohl subsp. jamaicense (Crantz) Kükenthal, JAMAICA SAWGRASS. Perennial herb, clonal, rhizomatous, fibrous-rooted, not rosetted, several-stemmed at base, ascending to suberect, in range to 150 cm tall; shoots with basal leaves and cauline leaves, foliage long, tough, fibrous, and harshly scabrous, glabrous and often glaucous; rhizome (not collected or observed) horizontal, to 10 mm diameter, with conspicuous cataphylls. **Stem:**  $\pm$  cylindric in  $\times$ -section, in range to 11 mm diameter, tough, being concave on 1 side of internode above axil; internodes hollow with wall to 2 mm thick with many vascular bundles, the central core pithlike and lacking vascular bundles. Leaves: alternate tristichous, simple with sheath; prophyll closed to midpoint, 2-keeled, flat to convex, reddish, truncate at top deeply cleft to midpoint; sheath closed, to 65 mm long, closely covering and concealing stem, surface having veins somewhat raised, glabrous; ligule absent; blade of basal leaves linear long-tapered to tip flat to crescent-shaped in ×-section, to  $1250 \times 15$  mm (flattened), of cauline leaves to 400 mm long, mostly keeled but only U-shaped at base, scabrous on margins, long-tapered to tip, parallel-veined with veins slightly raised, glabrous and glaucous; blade tissue with long air chambers. Inflorescence: spikelets, many spikelets in panicles, panicles terminal + axillary at to 6 nodes descending from top, panicle ascending to spreading with long peduncle, to 150 mm long, with 4-5 orders of branching, primary branches ascending arising alternate tristichous with length decreasing upward, clusters of 2–6 sessile spikelets at tips of ultimate branchlets to 7 mm across, spikelet of alternate scarious bractlets, with 3–4 sterile bractlets below a bractlet with a functionally staminate flower and the terminal flower bisexual, bracteate, glabrous; peduncle to 110 mm long, base of each peduncle tightly covered by a prophyll, the prophyll closed, membranous often red-orange, at the lowest peduncle to 12 mm long closed above midpoint, decreasing upward for panicles in the canopy and upward on branches and branchlets within each panicle, the long side of prophyll often shallowly notched; peduncle at base hemicylindric above midpoint elliptic in ×-section (nested in concave impression on plant axis), tough, green, smooth, glabrous, below top of peduncle sometimes with a bract, the bract closest and < 25 mm long; bract subtending the lowest branch of panicle (involucre bract) with short closed sheath tapered to tip, to 25 mm long; primary bract subtending primary branch, keeled and unevenly folded open and without sheath, the lowest to 12 mm long decreasing upward; minor axes cylindric, green; bract subtending spikelet and tightly appressed, ovate, to 1 mm long, papery and chestnut brown. **Spikelet:** ascending to spreading, sessile, narrowly elliptic to lanceoloid, ca.  $4 \times 1$  mm, sterile bractlets broadly ovate and sheathing, < 1 mm long increasing to 2.5 mm long, papery, chestnut brown, with conspicuous midvein, bractlet subtending staminate flower ca.  $3 \times 1.8$  mm, bractlet subtending bisexual flower ca. 4 mm long. Staminate flower: perianth absent; stamens 2, free; filaments slender and flattened front-to-back,  $3.5-4 \times \pm$ 0.2 mm, 1-veined, reddish; anthers basifixed, dithecal, tapered to short point at tip, in range 2.4–2.6 mm long, orangish to orange-red with purple point ca. 0.2 mm long at tip and short red tails at base, longitudinally dehiscent; pollen yellowish (whitish); pistil 1, sterile, to 1.5 mm long; ovary vestigial; style 3-forked from midpoint, rose-red, branches ascending, slender. Bisexual flower: perianth absent; stamens 2, free; filaments slender and flattened front-to-back, ca.  $4 \times 0.2$  mm, 1-veined, reddish; anthers basifixed, dithecal,

tapered to short point at tip, in range 2.4–2.6 mm long, orangish to orange-red with purple point ca. 0,2 mm long at tip and short red tails at base, longitudinally dehiscent; pollen yellowish (whitish); **pistil** 1, at anthesis ca. 6 mm long; ovary superior, club-shaped and somewhat 6-lobed, ca.  $1.5 \times 0.8$  mm, whitish to midpoint and light green above midpoint, 1-chambered with 1 basal ovule; style ca. 4.5 mm long, 3-forked, red, lower portion ca. 2 mm long, the stigmatic branches 2 at fork shortly 1 branch 2-forked, exserted from spikelet and curved to twisted. **Fruit:** achene, 1-seeded, enclosed by all scarious bractlets of spikelet with dried filaments and styles,  $\pm$  ovoid, in range ca.  $3 \times 1.5$  mm, blunt at top with or without persistent lower style (beak), base with rim and depressed around attachment, surface weakly or inconspicuously lobed or with dimples, outer thin cover pale green, covering a hard, thick wall ca. 0.25 mm thick initially purple drying purple-brown. **Seed:** spheroid, ca. 1 mm, growing seed colorless drying pale. A. C. Gibson