

Vascular Plants of Williamson County
Leersia hexandra – CLUBHEAD CUTGRASS [Poaceae]

Leersia hexandra Swartz, CLUBHEAD CUTGRASS. Aquatic perennial herb, clonal, with submersed, short-lived rhizomes and stolon-bearing, fibrous-rooted, not rosetted, shoots in sparse clones with stolons arising from mother plant, mother plant rooted from short rhizome having several emergent shoots, stolons submersed and horizontal initially with 1 emergent shoot at a node, in range to 35 cm tall; flowering shoot with several basal leaves including at least 2 with photosynthetic blades and ca. 4 cauline leaves, axes with hairs at nodes, conspicuously scabrous, shoot unbranched with terminal inflorescence or with an ascending lateral shoot from an axillary bud above midplant; rhizomes poorly defined with many adventitious roots; stolons (termed rhizomes by other authors) with long, slender internodes, to 30 × ca. 0.7 mm, with 1–3 adventitious roots per node with or without an emergent shoot. **Stems:** cylindric, hidden by sheaths, internodes smooth, nodes purple-red, appearing channeled to flattened, to 2 mm diameter, having dense, stiff, appressed downward-pointing hairs (incl. basal of leaf sheath) with hirsute hairs to 1 mm long. **Leaves:** alternate distichous, simple with sheath; prophyll at base of emergent shoot of mother plant, to 10 mm long, membranous, light red-purple, appearing open, conspicuously 2-keeled with wide membranous margins, with sparse minute teeth along keels; sheath open but tightly sealed around stems, sheaths often with sparse, minute scabrous teeth in vertical rows between veins, veins low-raised and somewhat folded at top descending from blade midrib, lobed at top (auricles) with an erect extension of margins 1–2 mm long; ligule fused to auricles, membranous but opaque, twisted on developing leaf and somewhat oblique obtuse, in range in range 2–3.5 mm long; collar indistinct; blade linear, in range 20–150 × 2.5–4 mm, dull green, with minute scabrous teeth on margins and along lower midrib, acuminate at tip, parallel-veined with principal veins raised on both surfaces, scabrous including rough on both surfaces, on lower surface having an interrupted line of reddish cells along each vein. **Inflorescence:** spikelets, in terminal panicle, lower portion within sheath of flag leaf and flag leaf blade often > inflorescence, fully expanded with ascending, racemelike lateral branches, 1(–2) branches per node (not tufted), panicle roughly ovoid in range to 70 mm long, spikelet with 1 bisexual floret, scabrous and nearly glabrous, lacking awns; panicle primary axis straight, ridged and sparsely pubescent at each node, having shorter primary lateral branches, branches and branchlets lacking pulvinus, lateral branches having several overlapping spikelets appressed to axes, with shorter lateral branchlets or not, branch axis crooked and irregularly twisted, with 2 lines of scabrous teeth, stalk of spikelet ascending, < 1 mm long, minutely scabrous along 1 edge. **Spikelet:** ovate in outline strongly flattened side-to-side, slightly gapped at tip, ca. 4–4.5 mm long, tough and translucent with green stripes (veins) and portions of faces often blushed red, breaking at base of spikelet; **glumes** absent; **lemma** glumelike, keeled and unequally folded flat, in range ca. 3.8–4 mm long, with 4 green veins (keel, 2 margins, and midline on the wider face), the faces 1 mm and 0.7 mm wide, on narrow faces often blushed red below midpoint. short-ciliate base-to-tip along keel and margin of wider face and short-ciliate at least from midpoint along margin of narrow face; **palea** glumelike, keeled and evenly folded flat, as long as lemma, keel green and short-ciliate, faces ca. 0.5 mm, red with membranous margins nearly to tip, lateral vein inconspicuous on each face. **Flower:** **perianth (ledicules)** 2, spatulate to obovate, ca. 0.5 × 0.25 mm, colorless,

persistent; **stamens** 6, free; filaments threadlike, fully elongated 2–2.5 mm long, colorless; anthers of several anthers exerted and others contained within spikelet, basifixed with anther extended below attachment, dithecal, in range 1.6–2 mm long, pale yellow to cream-colored, longitudinally dehiscent; pollen whitish; **pistil** 1; ovary superior, ovoid, ca. 0.25 mm long, whitish, glabrous, 1-chambered with 1 ovule; styles 2, lower portion mostly threadlike, 1 mm long, stigmatic upper portion exerted and bottlebrushlike below spikelet midpoint or close to spikelet base, ca. 1.5 mm long, axis colorless and papillate hairs cream-colored. **Fruit:** not observed (likely obligate outcrosser needing 2 genetically different clones; clone probably introduced locally with aquatic plantings), achene (caryopsis), dispersed within spikelet.

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