

Vascular Plants of Williamson County

Alternanthera philoxeroides – ALLIGATORWEED [Amaranthaceae]

Alternanthera philoxeroides (Mart.) Griseb., ALLIGATORWEED. Perennial herb, clonal, “stolon-bearing,” fibrous-rooted, not rosetted, mat-forming having submersed, creeping axes (“stolons”) and new shoots arising from nodes along procumbent axes (1 emergent shoot per node), emergent shoots decumbent, ascending to suberect, with inflorescence in range to 40 cm tall; shoots with only widely spaced, pairs of cauline leaves, emergent shoots appearing bent above nodes (geniculate but not jointed), appearing glabrous (having minute hairs on growing foliage); adventitious roots several from nodes of horizontal axes submersed and in wet substrate. **Stems:** ± cylindric, < 6 mm diameter, with fine green stripes, whitish, or tinged reddish and stolons rose, internodes to 110 mm long, with an pair of panels descending from a node having tiny and inconspicuous, fragile hairs, from beneath nodal ledges and axils of branches with a fringe of appressed straight hairs; internodes hollow, pith ± 1 mm diameter. **Leaves:** opposite decussate, simple, short-petiolate fused across node, without stipules; petiole ± appressed, somewhat fleshy, hemi-cylindric, < 5 mm long (other authors treat as sessile) and indistinct from blade, off-white with a green midvein; blade oblanceolate or narrowly obovate to narrowly elliptic or elliptic, in range 26–70 × 5–15 mm, long-tapered at base, entire to subentire with minute remnants of hairs on margins, acute to obtuse at tip, pinnately veined with midrib raised and secondary veins slightly raised on lower surface, midrib whitish, hairs initially on blade appearing 2-celled with ephemeral hair having spheroidal basal cells and pointed short terminal cell upward-pointing. Inflorescence: head, terminal on erect peduncle, peduncle appearing axillary but formed at growing tip paired with a continuing new shoot, head hemi-spheroid and compact, to 10 × 14–17 mm, of 50+ sessile flowers, flowers helically alternate and ascending to spreading-ascending, bracteate, glabrous; peduncle ± cylindric, to 70 × 1–1.8 mm, green, with 2 (opposite) inconspicuous lines of sparse hairs descending from head, lacking bracts along peduncle, solid; rachis toruslike, with some nonglandular hairs between flower; bract subtending flower receptacle on outer side overlapping a pair of opposite, lateral bracteoles, 3 structures equal, ovate with narrow tip, ca. 2.5 × 1.8 mm, colorless and scarious, with raised midvein on outer (lower) surface and sometimes minutely ciliate on margins, persistent. **Flower:** bisexual, radial, ca. 5 mm across; receptacle hemi-spheroid, 1 × 1.5 mm, whitish; **sepals (tepals)** 5, helically alternate, petal-like, ascending, oblong-ovate, in range ca. 5.5 × 2 mm, white, with overlapping bases, sometimes inconspicuously jagged approaching tip, on upper (inner) surface at base having a linear, pink **nectary** to 0.2 mm thick; **stamens** 5 (fertile), fused in a ring alternating with 5 staminodelike appendages (pseudostaminodes); tube ca. 1 mm long, lower portion orangish yellow, portion above midpoint colorless; filaments flat, triangular tapered from base, 2–2.3 × 0.5 mm and narrow approaching anther, colorless drying papery; anthers medifixed (versatile), monotheal (2-chambered), 1.1–1.3 mm long, orange-yellow, longitudinally dehiscent; pollen orange-yellow; pseudostaminodes flat, linear fringed at top, 2–2.5 mm long, mostly colorless drying papery with orangish yellow threadlike fringe (lobes); **pistil** 1, 1.5–1.7 mm long; ovary superior, ± top-shaped (bilateral) or oblate-obovoid, ca. 0.8 × 1.2 × 0.6 mm, light green with 2 thickened ridges, glabrous, 1-chambered with 1 ovule; style

erect, colorless, with terminal, conspicuously papillate, spheric stigma 0.3 mm. **Fruit:** utricle but in range not formed (clone incompatible). **Seed:** not observed.
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