

Vascular Plants of Williamson County

Alternanthera caracasana – MAT CHAFF-FLOWER [Amaranthaceae]

Alternanthera caracasana Kunth, MAT CHAFF-FLOWER. Perennial herb, mat-forming, fibrous-rooted, several-stemmed at base, mostly prostrate (decumbent with ascending branches where well-watered); shoots with only cauline leaves, ± 2-dimensional (plagiotropic), at each node having 2 leaves of different sizes by at least one-quarter (anisophyllous), at least stems villous with hairs to 2 mm long; adventitious roots at nodes.

Stems: cylindric, to 3 mm diameter, whitish to pale green, exhibiting short transverse flecks (crystal aggregates in tissue), densely villous especially on curved ledges at nodes.

Leaves: opposite decussate, simple, short-petiolate with ledges across node, without stipules; petiole ± flat on upper side, to 5 mm long, pale green, villous; blade broadly elliptic to ovate or obovate, 5–25 × 3–15 mm, tapered at base, entire with narrow white margins to midblade, acute to obtuse at tip, pinnately veined with midrib somewhat raised on upper surface and raised on lower surface, upper surface somewhat satiny and sparsely villous to glabrate, lower surface ± beaded (vesicular) and somewhat reflective.

Inflorescence: spike, axillary, ± conic, to 8 mm long, mostly 1 per node, compact, mostly of 7+ helically alternate flowers with associated scarious parts, each flower unit hemiovoid with flat face toward center, bracteate, on green tissues villous with flexible, barbed hairs 0.5–0.8 mm long grapplelike at tip; rachis hidden, to 4 mm long, green, angled; bractlet subtending flower cupped-ovate with short point at tip, ca. 3.5 mm long, scarious with green midvein, point 0.5 mm long, rounded on back (not keeled), glabrous; bracteoles 2 and lateral to bractlet, symmetrically or asymmetrically keeled and folded around edges of flower, ca. 3 mm long, lacking point at tip, scarious with barbed hairs along keel above midpoint. **Flower:** bisexual, not symmetric, ca. 1.5 mm across; **sepals** 5, helically alternate, dimorphic, green with wide scarious margins and barbed hairs on green tissue of lower (outer) side; outer 3 sepals ovate and short-acuminate, 2.7–3.1 × 1.2–1.3 mm long decreasing inward, 3-veined in green tissue but only 1-veined above midpoint; inner 2 sepals strongly folded and keeled, 2.1–2.5 mm long, base decumbent and green, scarious margins wide and conspicuous; **petals** absent; **stamens** 5, fused in ring alternating with slender appendage (pseudostaminode), ca. 0.75 mm long, included; membranous ring 0.2 mm long, filaments 0.3 mm long, appendages 0.1 mm long; anthers basifixed, dithecal, 0.35 mm long, pale orange-yellow, longitudinally dehiscent; pollen ochre; **pistil** 1, 0.8–0.9 mm long, included; ovary superior, somewhat top-shaped, 0.5–0.6 × 0.7 mm, green, glabrous, 1-chambered with 1 ovule; style stout, 0.2 mm long, green, with capitate, papillate stigma. **Fruit:** utricle, vertical, lens-shaped, ca. 1.3 × 1.3 × 0.6 mm, papery and pale brown; dried sepals and stamens present around utricle. **Seed:** lens-shaped, ca. 1.2 × 1.1 × 0.6 mm, glossy orangish brown and darker brown, with a broadly flattened raphe; sometimes having a long, flattened funiculus still connected to hilum.

A. C. Gibson