Vascular Plants of Williamson County

Polygonella americana – AMERICAN JOINTWEED, SOUTHERN JOINTWEED [Polygonaceae]

Polygonella americana (Fisch. & C. A. Meyer) Small, AMERICAN JOINTWEED, SOUTHERN JOINTWEED. Subshrub, with canopy having numerous terminal inflorescences, in range to 80 cm tall; shoots with only cauline leaves, glabrous. Stems: appearing to 4 mm diameter but more slender and completely hidden by at least 2 ensheathing leaves (ocreas). Leaves: helically alternate, simple, sessile, with stipules; stipules (2) fused as cylinder (ocrea), length difficult to determine, initially acute to obtuse at tip (on opposite side of blade); blade linear, $< 10 \times 0.6-0.7$ mm, 2-veined at base, flattened and white at acute tip, venation obscure except minutely channeled at base. **Inflorescence:** panicle of 1-several branches each having 1-several racemelike axes, racemelike axis 15+-flowered, flowers helically alternate and maturing from top downward, bracteate, glabrous; peduncle subtended by closed ocrea to 12 mm long, aging papery brown, ± truncate at top with short extensions of 8-10 principal veins; peduncle cylindric, to 25 mm long; branch with pulvinus in axil of fork, subtended by closed ocrea, ocrea sometimes with deltate lobe or shoulder at top; bract arising from top of ocrea to 10 mm long, green, with short point at tip; bractlet subtending pedicel an ocrea, ensheathing and membranous, to 1.5 mm long, with awl-shaped blade ca. 2.5 mm long, blade ± green but colorless at narrow tip; pedicel arising laterally and having a wide, disclike base (leaving a circular scar), axis compressed and ridged on 2 edges descending from sepals, ca. 2.5 mm long. Flower: bisexual, bilateral, $4-5 \times 4 \times 5$ mm; receptacle funnel-shaped, green, $0.6-0.7 \times 1$ mm; sepals 2, opposite, reflexed, inversely heart-shaped, cupped, and keeled (appearing hatchet-shaped in side view), ca. 2.2×2.5 mm, pure white with green keel, rounded to cordate at base with lobes ca. 0.4 mm long, short-clawed, rounded at tip; petals 3, ± rounded and symmetric or somewhat asymmetric, $3.3-3.5 \times 2.5-3$ mm, white with green only at attached base, subtruncate at base or 1 side wider and forming a short lobe, somewhat wavy on margins, rounded or shallowly notched at tip; stamens 8, fused into ring at base; ring ca. 0.3 mm long; filaments heteromorphic, ± 2.5 mm long, 3 broadly winglike below midpoint with linear tip, to 0.8 mm wide and sometimes with cream-colored, toothlike shoulder, 2 narrowly triangular tapered to tip, $3 \pm$ linear; anthers versatile-dorsifixed, dithecal, 0.5–0.8 mm long, cream-colored aging light beige, longitudinally dehiscent; pollen whitish; pistil 1, with styles exserted above erect petals; ovary superior, conspicuously 3-lobed (ovate-rhombate in outline), ca. 3×1.5 mm, glossy white, glabrous, 1-chambered with 1 ovule; styles 3, ascending, ± 0.8 mm long, white; stigmas terminal, orange. Fruit: achene, dispersed within perianth and with pedicel; achene 3-angled, to 3.2×1.7 mm, glossy reddish brown with brown angles, smooth; having 3 persistent styles and achene surrounded by a ring of stamens. A. C. Gibson