

Vascular Plants of Williamson County

Stylosanthes biflora – SIDE-BEAKED PENCIL FLOWER [Fabaceae]

Stylosanthes biflora (L.) Britt., Stearns & Poggenh., SIDE-BEAKED PENCIL FLOWER.

Perennial herb, taprooted from a vertical caudex, 1–several-stemmed at base, ascending to spreading, in range < 30 cm tall; shoots with only cauline leaves. **Stems:** cylindric, to 1 mm diameter, wiry, internodes to 35 mm long, short-tomentose with some longer hairs. **Leaves:** helically alternate, pinnately 3-foliolate, petiolate with pulvinus, with stipules; stipules 1, fused to petiole base-to-top and sheathing stem, membranous, 5–6 mm long, with green, linear free tip 3–4 mm long, bristle-ciliate on linear tip with bristles \perp and 3–3.5 mm long; pulvinus on petiole above sheathing stipules, 1 mm long, above pulvinus axis channeled 1.5 mm, short-hairy; stipels absent; petiolules = pulvinus, ca. 1 mm long, fine-hairy; rachis channeled, \pm 1 mm long; blades of leaflets elliptic, 16–21.5 \times 4–7 mm, terminal > lateral leaflets, tapered at base and of lateral leaflets somewhat asymmetric, entire and sparsely bristly ciliate above midblade, the hairs having swollen bases, acute with short point at tip, pinnately veined with midrib sunken on upper surface and principal veins raised on lower surface, surfaces short-villous (also margins). **Inflorescence:** flower initially solitary and axillary later forming condensed raceme to 4-flowered; pedicel cylindric, at anthesis ca. 3 mm long, concealed by stipular wings, greenish above midpoint. **Flower:** bisexual, bilateral, pealike (papilionaceous), ca. 8 mm across; hypanthium appearing like pedicel emerging from stipular sheath, tubular, ca. 3 mm long, membranous with tan stripes (veins), having a bracteole at midpoint, bracteole ca. 1 mm long, colorless, bristly-ciliate on margins and tip; **calyx** 4-lobed; tube \pm barrel-shaped, 1.5 \times 1.5 \times 1.2 mm, membranous with 10 green veins, glabrous; upper lobe 2 mm long, with notch at top 0.5 mm long (teeth), lateral lobes 2, triangular, ca. 1.2 \times 0.9 mm, lower lobe keel-like, ca. 3 mm long, margins soft short-ciliate; **petals** 5, clawed; banner erect, 9 mm long, claw wedge-shaped, 1.5 mm long, white, limb roundish, yellow with red nectar lines in center; wings 2, fused along tips around keel, ca. 6.5 mm long, claws linear, 1.5 mm long, limb oblong with a white, backward-pointing basal lobes 0.5 mm long; keel of 2 petals fused on lower side from midpoint to tip (closed at tip), 6.5 mm long, claws linear, 1.5 mm long, white, limbs ovate with basal lobe, keel not fused or adherent to wings; **stamens** 10, fused into column; column \pm 5.5 mm long, free filaments 2–3 mm long alternating long and short, white; anthers dorsifixed, dithecal, ca. 0.7 mm long, light orangish yellow, longitudinally dehiscent; pollen light orangish yellow; **pistil** 1, formed at base of hypanthium; ovary superior, ellipsoid, ca. 0.8 mm long, green, with short hairs approaching tip, 1-chambered with 2 ovules; style bent 1 mm above the longest stamens, ca. 8.5 mm long, white, with minute terminal stigma. **Fruit:** pod (legume), in range 5–6 mm long, schizocarpic breaking into 2 units, the lower unit infertile, the upper unit 1-seeded, obovoid, ca. 3 \times 2 mm, papery and veiny, short-hairy; with glabrous, short, down-hooked beak (style) at tip. **Seed:** \pm D-shaped, 1.5–2 mm long, yellowish brown, smooth.

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