

Vascular Plants of Williamson County

Plantago rhodosperma – RED-SEEDED PLANTAIN [Plantaginaceae]

Plantago rhodosperma Decne., RED-SEEDED PLANTAIN. Annual, taprooted, rosetted, often flat-rosetted, 1(–several)-stemmed at base, scapose with 1–several inflorescences, inflorescences erect to suberect, to 35 cm tall; shoots with only basal leaves, hirsute especially along veins and axes. **Stems:** at plant base where leaves attached. **Leaves:** helically alternate, simple, petiolate, without stipules; petiole 10–60+ mm long, indistinct from blade, U-shaped in \times -section, 3-veined or 5(7)-veined, aging reddish or purplish at base, tough and difficult to tear, base flared; blade oblong to oblanceolate or obovate, 19–130+ \times 5.5–38+ mm, long-tapered at base and stiffly folded upward, entire to inconspicuously dentate and often wavy on margins, acute at tip, parallel-veined with 3, 5(7) principal veins sunken on upper surface and raised on lower surface, with spreading hairs denser along veins of lower surface. **Inflorescence:** spike, axillary to younger basal leaf, many-flowered, densely arranged, overlapping and hiding rachis, cylindric to lanceoloid, in range 10.5–140+ \times 4–7 mm, flowers helically alternate, bracteate, hirsute; peduncle 30–190+ \times 0.7–1.8 mm, tough, villous, hairs to 1.5 mm long; rachis strongly ridged, hairy; bractlet subtending flower appressed and clasping lower calyx, awl-shaped and strongly keeled, ca. 3–3.5 mm long, green with hirsute-ciliate, scarious margins, upper surface with evenly distributed hirsute hairs, lower surface hirsute only along principal veins, persistent. **Flower:** bisexual, bilateral, ca. 2 mm across, perianth not spreading at pollination (essentially cleistogamous); **sepals** 4, essentially free, dimorphic, hirsute on green tissue, outer 2 sepals opposite lateral and overlapped by bractlet, broadly ovate and boat-shaped with keel, 3–3.3 \times \pm 2.5 mm, green with wide scarious margins (1 mm), short-ciliate on margins; inner 2 sepals overlapping, oblong, slightly $<$ bractlet, asymmetric with inner margin wider than outer margin, \pm keeled, with triangular to deltate green tip extended from keel beyond scarious margins; **corolla** 4-lobed; tube \pm 4-sided, 2.5–2.8 \times 0.6–0.7 mm; lobes not spreading at anthesis and erect and inrolled in developing fruit, ovate, \pm 2 \times 1.5 mm, with stiff midvein; **stamens** 4, fused to top of corolla tube below sinuses; filaments free portion 0.5 mm long, white; anthers dorsifixed, dithecal, 1.6–1.8 mm, pale yellow blushed purplish, with short point at tip, longitudinally dehiscent; pollen pale yellow; **pistil** 1, 4.3–4.5 mm long; ovary superior, \pm spheroid compressed front-to-back, 0.5–0.6 \times 0.6–0.65 mm, glossy green, 2-chambered, each chamber with 1 ovule; style pale green but reddish above midpoint, glabrous. **Fruit:** capsule, dehiscent around fruit just below midpoint (circumscissile), 2-seeded, ovoid compressed front-to-back, \pm 3 \times 1.9–2 mm, pale tan or upper portion aging red, glabrous. **Seed:** hemi-ovoid and limpetlike, 2.8–2.9 \times 1.8–1.9 \times 0.8 mm, bright red to blackish red with colorless margin, convex on outer side and flattened face on inner side with concave center having there fusiform hilum and micropyle.

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