Desmodium sessilifolium (M. Curtis) Torrey & A. Gray, SESSILELEAF TICK TREFOIL [Fabaceae]

Desmodium sessilifolium − SESSILELEAF TICK TREFOIL

Perennial herb, rhizomatous, fibrous-rooted from rhizome, not rosetted, 1-stemmed at base, principal ascending to suberect, to 100 cm tall; shoot with cauline leaves, mature shoot with well-developed axillary bud with exposed stipules, villous; rhizome ± horizontal, to 3 mm diameter. **Stems:** somewhat angled, to 5 mm diameter, striped green and tan, having projecting ledges of stipules at nodes, villous, lower stem with periderm. **Leaves:** helically alternate, pinnately 3-foliolate, petiolate with pulvinus, with stipules; stipules 2, attached to stem at base of petiole, acuminate-linear, 4.5–5.5 mm long, with 5 parallel veins, hirsute; petiole pulvinus 2–2.5 mm long, above pulvinus channeled, to 4 mm long; rachis channeled, to 6.5 mm long; stipel subtending petiulole for lateral leaflet and 2 for terminal leaflet, ascending, linear, 1.5–2.5 mm long, aging purple-red, short-hairy; petiulole jointed from rachis, pulvinus 1 mm long, above axis < 1 mm long; blades of leaflets oblong or narrowly elliptic to narrowly lanceolate or obovate, 15–63 × 2.5–13 mm, tapered at base, entire, acute at tip, pinnately veined with midrib raised on upper surface and principal and minor veins raised on lower surface, villous. **Inflorescence:** panicle of condensed, racemelike cymes, terminal, with to 5 flowers of different ages at each node and often a late developing axillary raceme, bracteate; bract (bractlet) subtending lateral branch cupped acuminate-ovate, 1.5–2.5 × 0.9–1.1 mm, reddish, parallel-veined with 5–9 veins from base raised on lower surface, short-hairy and with minute glandular hairs, early-deciduous; bractlet awl-shaped, < 1 mm long, with short hairs but not hooked; pedicel ca. 3 mm long increasing to 10 mm long, purple-red, with short hooked hairs and glandular hairs, the hooks upward, abscised beneath calyx. **Flower:** bisexual, bilateral, ca. 4 mm across; **nectary** on receptacle surrounding ovary; **calyx** 4-lobed, ca. 1.8 mm long; tube bell-shaped, ca. 1.3 × 1.3 mm, green to purplish above midpoint; lobes unequal, upper lobe deltate, lower 3 lobes triangular; **petals** 5, pealike (papiliaceous); banner fan-shaped, 5 × 4 mm, pink and light pink-purple with a pair of light green lines at midpoint; wings 2, 4.5 mm long, clawed, claw 0.8–1 mm long, white, limbs obovate, 1.5 mm wide, white at base to light purple above midpoint, with basal lobe; keel of 2 petals fused on lower side, clawed, claws 0.8–1 mm long, limbs scoolike, 4 × 3 mm, white at base with light purple above midpoint and on margin; **stamens** 10, monadelphous (all fused); filament column cylindric, 1 mm long + sheet of 9 stamens 3 mm long, surrounding stalk of pistil, filaments ca. 0.5 mm long, white, glabrous; anthers dorsifixed, dithecal, ca. 0.25 × 0.3 (from sheet) and ± 0.45 × 0.4 mm of solitary stamen), pale yellow, longitudinally dehiscent; pollen pale yellow; **pistil** 1, ca. 4 mm long, stalked (stipe), stalk 1 mm long, whitish, glabrous; ovary superior, ± cylindric compressed side-to-side, green and tinged reddish, with short, hooked hairs on upper margins and faces, 1-chambered with to 4 ovules attached to upper side; style curved, 1 mm long, pale to light green, glabrous; stigma terminal. **Fruit:** pod (legume) breaking into 1–2(–4) indehiscent 1-seeded units (loments), intact pod strongly constricted at chamber subunits, covered with short, hooked hairs (dispersal mechanism); loment ± elliptic lens-shaped compressed side-to-side bulging at seed, 5–6.2 × 3.4–4 × 1–1.5 mm, with tough, thickened margins, faces conspicuously veiny and with hooked hairs, terminal loment with beak. **Seed:** D-shaped (kidney-shaped) compressed side-to-
side, 3.5–4 × 2.5–2.8 × 1 mm, smooth and dull olive to green not mottled, with hilum centered on flat edge; stalk to 1.5 mm long in fruit, reddish.

A. C. Gibson