

Vascular Plants of Williamson County

Chamaecrista fasciculata – PARTRIDGE PEA, PRAIRIE SENNA [Fabaceae]

Chamaecrista fasciculata (Michx.) Greene, PARTRIDGE PEA, PRAIRIE SENNA. Annual, taprooted, unarmed, several-stemmed at base, not rosetted, erect to ascending with ascending to spreading branches, in range < 35 cm tall; shoots with only cauline leaves, exhibiting sleep movements when injured, soft-hairy; roots not obviously nodulated. **Stems:** cylindric, in range to 3 mm diameter, zigzagged, tough, green, internodes typically < 15 mm long, soft hairs < 1 mm long and mostly curved. **Leaves:** alternate distichous, even-1-pinnately compound, in range with 3–6 pairs of lateral leaflets spaced 3–3.5 mm apart along rachis, petiolate with pulvinus, with stipules; stipules 2, attached to petiole and stem at node, acuminate-triangular to acuminate-lanceolate, 2.5–5 × 1 mm, often with basal lobe on stem side, 3–5-veined at base, short-ciliate on margins; petiole to 6 mm long, pulvinus at base 1 mm long, with sessile nectary gland on upper side 1.5–2.5 mm from the lowest pair of leaflets and channeled above gland, the gland top-shaped with center depressed, 0.4–0.6 mm across, green, nectar-producing; rachis channeled, to 26 mm long including short extension above terminal leaflets, somewhat pilose; stipel subtending leaflet absent; petiolule = pulvinus, ± 0.7 mm long; blades of leaflets ascending from rachis, oblanceolate-oblong, 7–11 × 2.5–4.2 mm (terminal leaflets narrowly obovate, 5–10 × 1.5–4 mm), oblique at base, entire and short-ciliate on margins, obtuse with short point at tip, conspicuously pinnately veined with the strongest vein to tip and principal veins scarcely raised on lower surface, lower surface ± glaucous. **Inflorescence:** raceme, axillary, appearing cymelike, in range 1–several-flowered, flowers helically alternate, subsessile, opening on different weeks, bracteate; pedicel ascending with pulvinus at base, at anthesis 11–20 mm long not increasing in fruit, sparsely pilose aging glabrescent, with 2 opposite or subopposite bracteoles < 5 mm from flower, bracteoles acuminate-triangular and stipulelike, 3 × 0.8 mm, 3–5-veined from base, short-ciliate on margins. **Flower:** bisexual, slightly bilateral, 25–30 mm across; **nectary** nectar-producing receptacle below ovary; **sepals** 5, obovate and ± boat-shaped, 15–17 × 10–12 mm, green with green-yellow to yellow on margins, sometimes red at tip, keeled, white-pilose and red-pilose along keel, short-pilose in lines and at base; **petals** 5, short-clawed, in bud with “banner” inside “wings,” claws ca. 2 mm long, bright yellow, limbs equal, obovate, 15–17 × 7–12 mm, bright yellow with 2-lobed (heart-shaped) red to burgundy blotch above claw, blotch ca. 3 mm wide; **stamens** 10, free, all appearing fertile, of different lengths with 2 much longer; filaments cylindric, ca. 1 mm long, glossy greenish yellow; anthers basifixed, dithecal, after anthesis curved to sigmoid, 6.5–13 mm long, crimson or rose-red in bud aging deep purple with white or yellow; pollen pale pink; **pistil** 1, 11.5–14 mm long, short-stalked (stipe), subsessile increasing in fruit; ovary superior, compressed fusiform, ca. 7 × 1 mm, densely villous, 1-chambered with ca. 15 ovules attached to upper side; style curved upward and tapered to tip, glabrous; stigma terminal, minute, pale yellow-green. **Fruit:** legume (pod), dry, elastically dehiscent, to 12-seeded, strap-shaped, ± straight, in range to 55 × 5.5 mm, ± flat with bulges at seeds, brown with dark brown veins, obtuse at tip with short beak (style); valves twisting < 360°, like thick paper with vertical septa visible on inside wall, ± short-strigose with upward-appressed or arched hairs; stalk between pedicel and ovary to 1 mm long; bracteoles persistent in fruit. **Seed:** flattened-trapezoidal to

flattened-rectangular, $4-4.6 \times 2.5-2.8 \times \pm 1.2$ mm, \pm glossy brown, short-pointed at a corner and truncate on other end, with rows of minute, shallow pits.
A. C. Gibson