## Vascular Plants of Williamson County Chamaecrista fasciculata var. fasciculata – PARTRIDGE PEA, PRAIRIE SENNA [Fabaceae]

*Chamaecrista fasciculata* var. *fasciculata* (Michx.) E. 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, 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,  $2.5-5 \times 1$  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,  $\pm 0.7$  mm long; blades of leaflets ascending from rachis, oblanceolate-oblong,  $7-11 \times 2.5-4.2$  mm (terminal leaflets narrowly obovate, 5-10 $\times$  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  $\pm$  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,  $3 \times 0.8$  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  $\pm$  boat-shaped,  $15-17 \times 10-12$  mm, green with green-yellow to vellow 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,  $15-17 \times 7-12$  mm, bright vellow with 2-lobed (heart-shaped) red to burgundy blotch above claw, blotch ca. 3 mm wide; stamens 10, free, all appearing fertile; filaments cylindric, of different lengths, 8–11 mm long, green at base changing to yellow and orangish above midpoint; anthers basifixed, dithecal, curved inward, yellow; pollen light yellow; pistil 1, to 14 mm long, short-stalked (stipe), subsessile increasing in fruit; ovary superior, compressed fusiform, ca.  $7 \times 1$  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  $55 \times 5.5$  mm,  $\pm$  flat with bulges at seeds, brown with dark brown veins, obtuse at tip with short beak (style); valves twisting  $< 360^{\circ}$ , 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: flattenedtrapezoidal to flattened-rectangular,  $4-4.6 \times 2.5-2.8 \times \pm 1.2$  mm,  $\pm$  glossy brown, shortpointed at a corner and truncate on other end, with rows of minute, shallow pits. A. C. Gibson