

**Vascular Plants of Williamson County**  
*Vachellia farnesiana* – SWEET ACACIA, HUISACHE [Fabaceae]

*Vachellia farnesiana* (L.) Wight & Walker-Arnott (= *Acacia farnesiana*), SWEET ACACIA, HUISACHE. Small tree to large shrub, winter-deciduous, spinescent, several–many-stemmed at base, “trunks” ascending (never erect), with many spreading young branches in canopy, in range 200–550 cm tall,  $\leq$  canopy width (mature specimen); shoots with long shoot-short shoot organization, having most leaves and inflorescences produced on unexpanded short shoots, usually 1–3 leaves per short shoot during a season, inconspicuously short-hairy mostly along axes soon aging glabrescent; bark brown, cracked on principal lower stems. **Stems:** of long shoot with 1 poorly defined ridge from each leaf, aging  $\pm$  angled and soon woody, slightly zigzagged, internodes mostly 13–35 mm long (canopy branches), young stems sparsely short-hairy and soon appearing glabrous, green soon turning brownish and later with tight periderm, lenticels initially blisters aging elongate  $\perp$  axis; internodes of short shoots absent. **Leaves:** helically alternate, even-2-pinnately compound with (1–)2–6 pairs of primary leaflets (pinnae; rarely, a short leaf having only 1 pair with 1 primary leaflet producing secondary leaflets and 1 primary leaflet axislike without secondary leaflets), in range 13–60 mm long, petiolate with pulvinus, with stipules; stipules 2, sharp-tipped spines attached to base of petiole and divergent, mostly to 13 mm long, green rapidly aging reddish eventually becoming dry and whitish; petiole 5–15 mm long, pulvinus at base cylindric and 1–3 mm long, not thickened more than rest of petiole, with minute hairs, petiole above pulvinus channeled (2-ridged), short-hairy, on upper side usually with an elliptic-shaped nectary (gland) mostly 3–4 mm from pulvinus ( $\pm$  midpetiole; on small leaves often absent); rachis 2-ridged with primary leaflets ascending in opposite pairs from ridges, the pairs mostly 4–6 mm apart and diverging from rachis at ca.  $45^\circ$ , axis, often having an elliptic-shaped nectary (gland) between the last pair of primary leaflets and rarely a nectary between the first and second pair, rachis axis extending several mm beyond the last pair of primary leaflets, axis short-hairy; stipels subtending primary and secondary leaflets obscure; primary leaflets to 25 mm long, most primary leaflets per blade  $\pm$  same length, with 10–21 pairs of secondary leaflets (pinnules) along rachilla; petiolule of primary leaflets ascending, 1.1–1.6 mm long, mostly a pulvinus; rachilla 4-sided, short-hairy; petiolules of secondary leaflets 0.2–0.3 mm long, permitting sleep movements, essentially glabrous; blades of secondary leaflets overlapping, oblong,  $1.7\text{--}4 \times 0.4\text{--}0.8$  mm, subtruncate and slightly oblique at base, entire and sometimes short-ciliate on trailing margin, rounded to obtuse (acute) at tip, obscurely pinnately veined with midrib eccentric to leading margin, glabrous and somewhat glaucous. **Inflorescence:** headlike spike, axillary and  $<$  leaf, head spheric, fully open  $\pm$  5 mm across, flowers helically alternate and densely packed, ca. 80-flowered, bracteate, puberulent; peduncle straight,  $<$  10 mm long, with constriction at base; bract subtending spike, shieldlike and strongly reflexed,  $\pm$  1.2 mm long, purple-red, hard, puberulent; bractlet subtending flower oblanceolate, ca. 1.5 mm long, often with yellowish, flat axis and a reddish blade, short-ciliate tip, puberulent. **Flower:** bisexual, radial, 0.6–0.7 mm across; **nectary** absent; **calyx** 3–5-lobed; tube V-shaped,  $\pm$  1 mm long and 0.7–0.8 mm wide at orifice, transparent-orange; lobes obtuse, reddish, faintly 5-veined; **corolla** short 5-lobed, erect and fitting tightly within corolla,  $\pm$  2.3 mm long, transparent

yellow; tube  $\pm$  2 mm long; lobes deltate, 0.3–0.5 mm long, with thickened margins and often purple blotch at tip, short-strigose on outer (lower) surface, in bud and at anthesis bent over orifice; **stamens** 30+, exerted; filaments threadlike, 4–5 mm long, golden yellow, not smooth; anthers dithecal, 0.25 mm long, golden yellow, longitudinally dehiscent; producing pale yellow pollinia (permanently united pollen); **pistil** 1, 6.5–7 mm long, short-stalked, the stalk 0.3–0.35 mm long; ovary superior, fusiform, 0.9–1.1 mm long, light green, glabrous, 1-chambered with ca. 20 ovules attached to upper side; style exerted ca. 2 mm above anthers, ascending, unevenly thickened,  $\pm$  straight, light yellow; stigma terminal, minute. **Fruit:** legume (pod), indehiscent, several–19-seeded, variously curved to nearly straight, in range 60–80  $\times$  8–10  $\times$  8–10 mm (fully loaded with seeds), dark brown, bulging at seeds, having 2 rows of seeds and 2+ seeds per bulge, wall thick with pulp filling chamber; stalk  $<$  4 mm long, woody. **Seed:** ovoid to ellipsoid slightly compressed side-to-side, 4–7  $\times$  3.6–5 mm, dull olive-brown, smooth, usually with an ovate mark on compressed faces and a small terminal hilum.

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