

**Vascular Plants of Williamson County**  
*Styphnolobium affine* – EVE'S NECKLACE [Fabaceae]

*Styphnolobium affine* (Torrey & A. Gray) Walp. (syn. *Sophora affinis*), EVE'S NECKLACE. Small tree or shrub, winter-deciduous, not spinescent, 1–several-stemmed at base, in range to 600 cm tall; shoots with only cauline leaves, short-strigose, lacking glandular hairs.

**Stems:** initially ridged aging with periderm and cylindric, young twigs with prominent projecting leaf bases. **Leaves:** helically alternate, odd-1-pinnately compound with 9–17 leaflets (strongly folded in bud, conduplicate), leaflets mostly paired and opposite or subopposite, petiolate with pulvinus, with stipules; stipules 2, attached to lower petiole, linear, to 3.5 mm long, short-hairy, early-deciduous; petiole 18–32 mm long, pulvinus 1.5–2.5 mm long, short-hairy, with 2 pits near base where stipules formerly attached, above pulvinus channeled; rachis channeled like petiole, to 90 mm long, short-hairy on upper side; stipel at base of petiolule on ridge, ascending, acuminate, 0.4–1.5 mm long, blackish at tip, short hairs curved upward; petiolule = a wrinkled pulvinus 2–2.5 mm long, yellow-green; blades of leaflets ± symmetric, ovate to elliptic (terminal leaflet sometimes obovate), 7–30 × (< 5–)6–14 mm, tapered at base, entire, acute to obtuse at tip appearing minutely notched with a backward-curved to lower surface, pinnately veined with midrib raised on lower surface, upper surface initially short-hairy aging glabrescent except with hairs along midrib, lower surface short-strigose with upward-pointing hairs and paler than upper surface. **Inflorescence:** raceme, axillary from a low node on new spring shoot, pendent below foliage, mostly 15+-flowered, bracteate, short-strigose; peduncle cylindric, to 23 mm long not increasing in fruit; rachis cylindric with projecting bractlet bases, after flowering < 100 mm long; bractlet subtending pedicel linear, 0.9–1.5 mm long, early-deciduous (in early flower bud); pedicel cylindric, to 5.5 mm long increasing 2× in fruit. **Flower:** bisexual, bilateral, pealike (papilionaceous), ca. 11 mm across, **nectary** nectar-producing receptacle below ovary; **calyx** inconspicuously lobed, bell-shaped and somewhat boxy, 3–3.5 × 4 mm, green or blushed purplish, short-strigose with upward-pointing hairs; **petals** 5, free, clawed; banner claw flat, ca. 3 × 1 mm, white, limb bent backward from claw and widely spreading, roundish, 10.5–11.5 mm, white or somewhat pale pink with bright yellow central blotch with nectar lines radiating outward, having a shallow groove along midline, slightly notched at tip; wings 2, projecting forward ⊥ banner limb and parallel with keel, claw linear, 3.5–4 mm long, rose-lavender, limb ovate, 10.5–11.5 × 6–6.5 mm, < wings, light purple to darker at tip, with a basal lobe on upper edge white at tip, obtuse at tip, midvein below midline and curved to tip; keel of 2 separate petals, claw linear, ± 4 mm long, limbs overlapping in bud and at anthesis, cupped-triangular, ca. 9 × 6.5–7 mm, light purple at base to dark purple at tip; **stamens** 10, diadelphous (9 fused + 1 free), concealed within keel; filament sheet only 1.5 mm long, free portions ca. 10 mm long and curved upward from midpoint and subequal, of free stamen ca. 9 mm long, white, glabrous; anthers dorsifixed, dithecal, ± 0.9 mm long, yellow-orange, longitudinally dehiscent; **pistil** 1, stalked (stipe), stalk green and glabrous; ovary superior, cylindric, ca. 5.5 × 1 mm hidden by a dense cover of white hairs, 1-chambered with ca. 12 ovules attached to upper side; style tapered and curved gradually upward, ca. 5 mm long, light green at base to pale green at top, with a minute terminal stigma at the level of the longer stamens, stigma papillate and lacking short hairs. **Fruit:** pod (legume), stalked, pendent,

indehiscent, 1–4-seeded, conspicuously and narrowly constricted between seeds like a bead necklace, 33–70(–150) mm long (including beak, style) rarely not constricted by with bulging seeds, exocarp leathery, black and wrinkled, pulp (mesocarp) fleshy and sticky, segments subspheroid, 9–11.5 × 6.5–8 mm, connecting by slender cylinder of tissues; pedicel to 11 mm long, short-tomentose. **Seed:** lens-shaped ovoid to ellipsoid, 5–5.8 × 3.3–3.7 × 2 mm, dull dark brown to blackish, with hard seed coat, often with a deeply indented hilum.

A. C. Gibson