

Vascular Plants of Williamson County
Amorpha fruticosa – FALSE INDIGO [Fabaceae]

Amorpha fruticosa L., FALSE INDIGO. Shrub, winter-deciduous, unarmed, several-stemmed at base, new shoots arising 1–several nodes beneath terminal inflorescence, with a somewhat open canopy, in range 100–250 cm tall; shoots with only cauline leaves, short-hairy, covered with flat to domed, small, blisterlike glands, strongly scented. **Stems:** with broad ridge from each leaf base, cylindrical, green often turning reddish, ± short-strigose but with glabrous patches. **Leaves:** helically alternate, odd-1-pinnately compound with 9–25 leaflets (commonly 17) with lateral leaflets mostly in opposite pairs (later appearing subopposite), to 190 mm long, petiolate with pulvinus, with stipules; stipules 2, attached to leaf base just below pulvinus, slender with needlelike tip, to 2 mm long, red, typically abscising early; petiole to 16 mm long, pulvinus barrel-shaped and ca. 3 mm long, channeled above pulvinus with scattered glands, short-hairy aging glabrescent; rachis channeled on upper side (2-ridged), with pairs of leaflets 10–14(–22) mm apart, short-hairy; stipules attached to ridges of rachis on base of petiolule 2 (sometime 1 for terminal leaflet), ascending toward leaf tip, to 2.3 mm long, with gland at base on outer side, axis red often abscising or broken off; petiolules pulvinuslike, 2–3 mm long, green, ± short-strigose; blades of leaflets elliptic or lanceolate-elliptic to oblong or oblanceolate-elliptic, < 20–31 × 6–12 mm, broadly tapered at base, entire, obtuse with red, sharply curved tail-like point at tip, conspicuously pinnately veined with lateral veins slightly raised on upper surface and midrib slightly raised on lower surface, dotted with evenly spaced yellowish glands, lower surface with appressed, upward-pointing short hairs, when developing folded upward along midrib and short-sericeous. **Inflorescence:** raceme or with raceme branch at base, terminal and densely flowered with helically alternate flowers, 70–170 mm long fully expanded, in bud 8–10 mm diameter and at anthesis 18–20 mm diameter, bracteate; peduncle short, to 2 mm long; rachis strongly ridged, 1 mm diameter, with ridge descending from bractlet and having projecting bractlet bases, short-strigose with upward-pointing hairs; bractlet subtending pedicel lanceolate with long, slender tip, to 2.5 mm long, reddish and papery, 1-veined, early-deciduous; pedicel at anthesis 1.4–2 mm long, glabrous. **Flower:** bisexual, bilateral, modified pealike (papilionaceous), ca. 1.5 mm across; proterogynous; **nectary** receptacle tissue, nectar not observed; **calyx** 5-lobed, ca. 2.5 mm long; tube narrowly funnel-shaped, green to midpoint and crimson above midpoint, with blisterlike glands especially obvious on red portion, glabrous and ± glossy; lobes deltate to broadly triangular, 0.3–0.6 mm long, the longest on the lower side, minutely white-ciliate on margins; **petals** 1 = banner, lacking claw; banner spatulate-obovate and hoodlike, ca. 5 × 2.5 mm long, deep purple but white at base; **stamens** 10, monadelphous (10 fused but barely so as a short tube), exerted 1–1.5 mm beyond banner; tube surrounding green portion of pistil, ca. 1.5 mm long, whitish; filaments free portions unequal, 3–4.5 mm long, whitish at base to pale purple at midpoint and purple to light purple at top; anthers versatile-dorsifixed, 0.65–0.8 mm long, orange-yellow, longitudinally dehiscent; pollen orange-yellow; **pistil** 1, 5–5.5 mm long, ≤ stamen length; ovary superior, obovoid, ca. 0.7 × 0.4 mm, glossy green, glabrous, 1-chambered with 2 ovules attached to upper side; style exerted before stamens, curved, green at base to purplish red above midpoint, with sparse, ascending short hairs in middle portion; stigma

small-capitate, orangish. **Fruit:** pod (legume), dry, indehiscent, typically 1-seeded, obovoid comma-shaped, $4.5-7 \times 1.6-2$ mm, dull, with conspicuous, blisterlike glands, glabrous but with short beak with several short hairs. **Seed:** \pm oblong compressed side-to-side, slightly shorter than fruit, dull brownish, concave around hilum.

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