

## Vascular Plants of Williamson County

*Caesalpinia gilliesii* – POINCIANA, BIRD-OF-PARADISE [Fabaceae]

*Caesalpinia gilliesii* (Hooker) D. Dietr., POINCIANA, BIRD-OF-PARADISE. Shrub, ± evergreen, in range to 200 cm tall; shoots with airy, feathery leaves showing sleep movement of secondary leaflets, short-pilose and conspicuously capitate glandular-hairy on young stems and inflorescences, the glandular hairs with stalked cup-shaped heads, the heads orange-yellow soon aging dark red, sometimes with fine radiating hairs or hairs stalks appearing stellate (older stems, after stalk shrivels and losing head), somewhat foul-smelling. **Stems:** ± angled, with broad, rounded ridge descending from each leaf, with projecting persistent leaf bases, internodes < 25 mm long, short-pilose and capitate-glandular. **Leaves:** helically alternate, even-2-pinnately or odd-2-pinnately compound with 7–13 primary leaflets, primary leaflets paired or not along axes, petiolate with pulvinus, with stipules; stipules 2, strongly attached to stem at node and petiole, arching outward to recurved, deltate to tongue-shaped or ovate, to 4.5 × 3 mm, stiff to hard, fringed on margins, acuminate to rounded at tip, short-pilose, upper surface convex; petiole 5–65 mm long, with a broad pulvinus at base, glabrous to short-hairy, pulvinus channeled; blade oblong in outline; rachis (30–)90–200 mm long, glabrous or sparsely red-glandular but glandular hairs often lacking stalk, during early growth several glands produced at base of each primary leaflet (= stipels); primary leaflets widely spreading to ⊥ rachis, 25–60 mm long, the longest at midblade, even-pinnate with 7–10(–12) pairs of secondary leaflets; petiolules 3–6 mm long, pinkish, glabrous or sparsely red-glandular, with a cylindrical pulvinus 1.5–2.3 mm long at base, during early growth having 1 gland at each outer base of petiolule; petiolules ± 0.5 mm long, reddish and wrinkled like a pulvinus; blades of secondary leaflets (pinnules) lanceolate to oblanceolate or elliptic, 3–8(–9) × 1.3–3.2 mm, oblique at base, entire, acute at tip, pinnately veined with midrib slightly raised on lower surface and inconspicuous lateral veins, dull, glabrous, glaucous, dotted with several red to black glands embedded along each lower margin. **Inflorescence:** raceme, terminal, typically 30–40-flowered, flowers helically alternate, bracteate, short-pilose and capitate-glandular; axis 100–150 mm long; bractlet subtending pedicel conspicuous, partially enveloping and hiding flower bud and abscising early, broadly ovate, 17–25 × 5–7 mm, pale or light green, cupped at base, fringed and capitate-glandular on margins and tips of fringe, lower surface short-pilose and capitate-glandular; pedicel ascending to spreading, typically 20–35 mm long. **Flower:** bisexual, ± bilateral (caesalpinoid), 40–45 mm across (excluding flaring stamens), showy with spreading yellow perianth and long-exserted, red stamens and style; hypanthium inversely conic, ± 4–7 mm long, oblique above midpoint, thick-walled, **nectary** nectar-producing receptacle, with copious thin nectar (morning); **sepals** 5, spreading, subequal, oblong to elliptic, 15–25 × 7–9 mm, the lowest sepal slightly larger and boat-shaped, yellow or greenish yellow, capitate-glandular ciliate on margins, fringed at tip and weakly fringed on outer margin, upper surface glabrous, lower surface short-pilose and capitate-glandular; **petals** 5, spreading, with upper petal (banner) internal to 2 adjacent, lateral petals (wings) oblanceolate to obovate, petals 18–35 × 12–21 mm, yellow sometimes with faint orange veins and aging reddish; **stamens** 10, free, long-exserted; filaments arching, 70–100 mm long, glossy vivid to strong red, mostly glabrous but conspicuously pubescent to short-pilose at bases with club-shaped hairs, coiled in bud;

anthers versatile, dithecal, oblong, 3–4 mm long, red, slightly cordate at base, longitudinally dehiscent; pollen yellow to yellow-orange; **pistil** 1, 100–110 mm long ( $\pm$  10 mm longer than the longest stamens), stalked (stipe), stipe 3 mm long, soft-hairy; ovary superior, narrowly lanceoloid, ca. 10 mm long, white short-pilose to villous, densely capitate-glandular, 1-chambered with  $\pm$  10 ovules attached to upper side; style straight, vivid or strong red, pubescent or short-pilose with white hairs; stigma inversely conic, hollow. **Fruit:** pod (legume), dry, dehiscent by 2 twisting valves, < 10-seeded, when immature straight to somewhat curved and oblong to oblong crescent-shaped or hatchet-shaped, 60–120  $\times$  14–20 mm, brown, flat, oblique at base, short-pilose to short-villous and capitate-glandular dotted, obliquely beaked, exposed inner wall of valves yellow-tan. **Seed:** lenticular-obovoid to lenticular heart-shaped, 11–15  $\times$  9–13 mm, dull brown with fine black spots, truncate at tip, hard; hilum roundish,  $\pm$  0.3 mm, whitish.

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