

**Vascular Plants of Williamson County**  
*Gossypium hirsutum* – UPLAND COTTON [Malvaceae]

*Gossypium hirsutum* L., UPLAND COTTON. Annual, taprooted, in range 1-stemmed at base, not rosetted, much-branched in canopy, erect, in central Texas to 60 cm tall (cultivars); shoots with only cauline leaves, pubescent of “hirsute” hairs with (1–)2–6 arms fused at base, to 2 mm long, surfaces gland-dotted with spheric glands containing the phenol gossypol, glands mostly black (yellow = unoxidated). **Stems:** initially with a broad ridge from each leaf aging cylindric, to 8 mm diameter, initially conspicuously pubescent aging with sparser hairs, conspicuously gland-dotted; pith solid and white; older stem with woody cylindric with a fibrous cover. **Leaves:** helically alternate, palmately (3)5-lobed to midblade, mostly long-petiolate, with stipules; stipules 2, attached to node distinct from base of petiole, asymmetrically acuminate-lanceolate to narrowly lanceolate (ovate), to 15 × 4.5 mm, light brown to brown and black gland-dotted, ciliate on margins, 5–9 veined at base and netlike above midpoint, upper surface glabrous, lower surface with hairs along some principal veins, leaving a linear scar on stem; petiole not channeled, 15–100+ mm long, tough, pubescent and gland-dotted but also initially with minute glandular hairs; blade somewhat roundish in outline, < 60–140 × < 60–150 mm, terminal lobe > middle lobes > basal lobes, acuminate-ovate (principal lobes) with triangular basal lobes, lobes somewhat bunched at sinuses, cordate at base, entire and ciliate on margins, palmately veined at base and pinnately veined into lobes with principal veins slightly raised on upper surface and strongly raised on lower surface, tissue gland-dotted especially visible on lower surface incl. principal veins, emerging blade densely hirsute aging with hairs more widely spaced. **Inflorescence:** flower solitary or several in leafy and racemelike on lateral branches, bracteate, hirsute of hairs with to 6 arms and surfaces gland-dotted. **Flower:** bisexual, radial, 65–80 mm across (cultivated cultivars); **calyx** 5-lobed, ± 10 mm long, whitish to greenish approaching margin black gland-dotted on tube, glabrous; tube ± barrel-shaped, ca. 5 mm diameter, ± 25-veined at base; lobes appressed to corolla and concealed by bracteoles, broadly obtuse-triangular, ca. 3 × 8 mm; **petals** 5, twisted in bud and overlapping, fused at base 4–5 mm to staminal column, free portion spreading, fan-shaped and delicate, 25–40 × 38–45 mm, cream-colored (“pale yellow”) aging pinkish to rose (cultivars can be white or light yellow with red-purple trapezoidal blotches at base), conspicuously ciliate around sinuses with hairs upward on only 1 margin, lower surface with many raised veins and yellow gland-dotted between veins, upper surface pubescent near ciliate margin; **stamens** ca. 100, ca. 23 mm long including an expanded column covering ovary and fused to petals; column below filaments 8–10 mm long, white with scattered yellow gland dots, free filaments ascending to spreading, 4–8 mm long, white, lacking hairs and glands; anthers basifixed, monotheical, 2 mm across, yellowish to cream-colored aging pinkish (in other cultivars light yellow), longitudinally dehiscent along top; pollen white; **pistil** 1; ovary ovoid, ± 9 × 7.5 mm, tannish with black gland dots, smooth, (3–)4(–5) chambered with to 11 ovules in each chamber attached to center, the ovules obovoid, ca. 1.5 × 1 mm, white; style straight and erect through staminal column, 3–5 branches, below fork and cream-colored above with black gland dots, the stigmatic branches appressed and fleshy, 9–10 mm long. **Fruit:** capsule, loculicidal, dehiscent from tip downward but not reaching base, mostly < 30-seeded, ovoid (spheroid), closed ca.

40–60 mm long (boll), brown, with furrows between valves, the valves drying outrolled, hard, with spreading sharp point at tips, each chamber filled with a ball of hairs (cotton ball) often projecting beyond valves. **Seed:** covered with extremely long cellulosic hairs (lint) and a dense undercover of shorter hairs (fuzz); seed obovoid to narrowly obovoid, 7–10 mm long, black, embryo with scattered black glands; lint curved or twisted, mostly 20–30 mm long and pure white, fuzz mostly 2–7 mm long.

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