

Vascular Plants of Williamson County

Canna ×generalis – COMMON GARDEN CANNA, INDIAN-SHOT [Cannaceae]

Canna ×generalis L. H. Bailey (selections of *C. indica* L. × *C. glauca* L.), COMMON GARDEN CANNA, INDIAN-SHOT. Aquatic perennial herb, clonal, strongly rhizomatous, fibrous-rooted, not rosetted, 1-stemmed at base arising from tip of rhizome, unbranched or branched only on inflorescence, erect to steeply ascending, in range with inflorescence to 275 cm tall; shoot with 1–2 basal leaves and to 5 cauline leaves, blades large and widely spaced along thick stem, on a diminutive shoot with short, narrow stems the basal 1–2 leaves may lack blade or have a vestigial blade axis, glabrous and lacking glandular hairs; rhizome horizontal, shallow, to 30 mm diameter, white, with scale at each node, deltate, mostly 20–30 mm, membranous aging dark brown; adventitious roots abundant, mostly nodal. **Stem:** cylindrical, to 25 mm diameter at base decreasing upward, concealed by leaf sheaths nearly base to top, where covered white and often glossy; solid. **Leaves:** alternate distichous, simple, petiolate (most cauline leaves) to sessile and clasping (the uppermost 1–2 cauline leaves), with sheath, without stipules; sheath open, slightly overlapped at node, thick and fleshy thinned to membranous margins, green and smooth; petiole channeled, fleshy, to 50 mm long, nongreen, indistinct from blade if green winglike margin present; blade in range ovate, (150–)350–600 × (75–)130–200 mm, some leaves on clone somewhat glaucous, tapered at base, entire and somewhat evenly membranous on margins, acute at tip, “pinnately” veined with bulky midrib sunken on upper surface and conspicuously raised on lower surface, lateral veins parallel and not raised on either surface, but blade having a veinlike structure elevated every 10 mm on upper surface and somewhat indented on lower surface. **Inflorescence:** panicle of to 12 2-flowered cymes (cincinni), terminal on long peduncle, panicle to 300 × 150 mm, sometimes 2-forked at base, in range with cymes spaced along rachis and flowers overlapping, flowers of each cyme of 2 different ages, ascending, bracteate with bracts distinctly glaucous, totally glabrous and lacking glandular hairs; bract subtending peduncle = and open, tubular sheath (flag leaf) to just below the lowest cyme, flattened ca. 40 mm wide, green with narrow colorless to purplish margins; peduncle cylindrical, mostly 400+ mm long; rachis somewhat zigzagged, mostly triangular in × section with 3 well-defined angles, tough, the lowest internode to 60 mm long decreasing upward, dotted with minute stomates; bracts attached at the lowest node 2 and unequal, appressed to internode and overlapping + split by spreading axis of cyme, fan-shaped to broadly obovate or 2-lobed, mostly unpigmented, with parallel veins, the largest of a pair to 20 mm long but often 10–12 × 12–15 mm; bractlets subtending pedicel 2 and unequal, the larger obovate truncate at base, ca. 11 × 5 mm, with ca. 10 parallel lines, aging papery brown in fruit; pedicel at anthesis ca. 8 mm long increasing 2× in fruit, > bractlet, green. **Flower:** bisexual, not regularly symmetric, 50–70 mm across (staminodes); **sepals** 3, on top of ovary, appressed to petals, overlapping, unequal, erect, ovate, 10–13 × 5.3–7.2 mm increasing some in fruit, glaucous and greenish in center with colorless margins and some scarlet dots, persistent; **petals** 3, strongly overlapping at bases, ascending spaced 120° apart, inrolled to the upper side and appearing long-tapered tubular, in range ca. 50 × 3 mm but unrolled lanceolate and 10 mm across, initially ± yellow aging mottled with yellow orange or reddish pigment, parallel-veined, with membranous margins 1 mm wide, acute at tip; **stamen** 1 fertile + 3 showy

staminodes, attached to style column on back side; staminodes petal-like, planed to back side of flower ascending, unequal, overlapping at base and with cupped, linear lower portion and flattened, broad upper portion, $\pm 45\text{--}59 \times 13\text{--}15$ mm, orangish on overlapping bases, scarlet to above midpoint, mostly light yellow above midpoint with scarlet spots, rounded to notched at top; fertile stamen with style positioned to left side of flower, filament petal-like about 5 mm wide, mostly yellow to anther then with a triangular extension above attachment of anther sac, ca. 9×5 mm and scarlet with orange, extension aging recurved to coiled; anther dorsifixed, monothecal, slender and linear, 12–13 mm long, yellowish white aging with reddish along suture, longitudinally dehiscent toward adjacent stigma; pollen cream-colored; **pistil** 1, ca. 50 mm long; ovary inferior, subspheroid, ca. 9×6.5 mm, glaucous light green, covered with densely packed columnar, watery hairs 1 mm long, the hairs rounded at end, 3-chambered, each chamber with < 10 ovules attached to center; style thick-walled cylindrical fused for several mm with staminodes and fertile stamen, the column ca. 3 mm diameter and somewhat angled, the wall ca. 0.7 mm thick, greenish, the free portion showy and petal-like, the free portion ribbonlike, about 27 mm long, 2 mm wide at base, 3 mm wide at the widest point, glossy scarlet on faces, the stigma oblique and crestlike at top ca. 1.5 mm across, then decurrent for several mm on 1 edge, opaque and wet. **Fruit:** capsule, potentially septicidal but typically releasing seeds by desiccation of thin outer wall with water-filled projections (“warty”), 3-chambered, broadly elliptic in outline conspicuously 3-lobed, in range with < 6 seeds and ca. 30×20 mm, densely covered with water-filled, conic projections mixed short to 3 mm long (not spinescent), when immature glaucous pale green; on top with short, volcanolike beak (persistent lower portion of style-stamen column) ca. 3.5×3.5 mm and 3 erect, overlapping sepals, lower portion of beak with vesiclelike circles, the sepals subequal, ovate, 10–15 mm long; pedicel. **Seed:** spheroid, in range ca. 8×7 mm, glossy black, with evenly spaced minute pits (ca. $10/\text{cm}^2$).

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