

Vascular Plants of Williamson County

Anisacanthus quadrifidus var. *wrightii* – WRIGHT ANISACANTHUS, FLAME ACANTHUS, TEXAS FIRECRACKER, MEXICAN FIRE [Acanthaceae]

Anisacanthus quadrifidus (Vahl) Nees var. *wrightii* (Torrey) Henricks., WRIGHT ANISACANTHUS, FLAME ACANTHUS, TEXAS FIRECRACKER, MEXICAN FIRE. Shrub, fall-deciduous, not rosetted, several-stemmed at base, with many ascending principal shoots from several basal woody branches, vigorous principal shoots with 1–2 ascending axillary shoots from consecutive nodes, in range 100 cm tall (cultivated plants to 180 cm); shoots with only cauline leaves, foliage and stems with short nonglandular hairs and initially with minute glandular-puberulent hairs having tiny stalks. **Stems:** initially with a pair of low, broad ridges descending from leaves at node soong aging cylindric with woody tissue, internodes to 50 mm long with 2 broad lines of white, curved short hairs, nodes often tinged red-purple; woody old stems to 25 mm diameter, with patches of light green tissue and light tan periderm. **Leaves:** opposite decussate, simple, petiolate, with pair connected by ledges across nodes, without stipules; petiole channeled, to 11 mm long, short-hairy in channel, lower side with minute glandular hairs; blade lanceolate, < 20–64 × 7.5–25 mm, tapered at base, entire to slightly wavy and short-hairy along margins (not strictly ciliate), acute to acuminate at tip, pinnately veined with principal veins somewhat raised on lower surface, surfaces having short hairs along midrib or also several other principal veins. **Inflorescence:** spikelike panicle of axillary condensed cymes, terminal, axis to 80 mm long and ascending, commonly 1-sided with flowers reoriented from lower side, nodes 8+, typically only 1 axillary bud per node forming a condensed cyme, cyme subsessile and 1–2(–several)-flowered, decussate with only 1 flower per node, bracteate, initially glandular-hairy on buds, mostly minute glandular-puberulent hairs, sometimes also mixed with short-stalked glandular hairs with larger heads (less visible on older tissues); peduncle stemlike, 12–20 mm long, with opposite, broad lines of short white hairs; rachis somewhat zigzagged (straight), stemlike, each internode with a pair of broad lines of short hairs; bracts opposite decussate, at each node 1 bract appressed to rachis and the other bract (bractlet) subtending the first flower of an axillary cyme and ascending, bractlet at the first node subtending the lowest flower, leaflike with short petiole, to 9 mm long decreasing upward, the petiole to 2.5 mm long with glandular-puberulent hairs, change to sessile at successive nodes, the blade at the first node lanceolate decreasing upward and becoming ovate, becoming black and early-abscised, for each cyme subtending at next node (second flower of cyme) having 2 bractlets opposite fused across node, triangular to deltate, short, bractlets puberulent and with stalked glandular hairs, often puberulent-ciliate on margins. **Flower:** bisexual, bilateral but appearing radial (equidistant, widely spreading corolla lobes), in range ca. 25 mm across (lateral lobes of lower lip); **calyx** 5-lobed, ± 3.5 mm long, green often tinged red at lobe tips, outer surface densely glandular-puberulent mixed with larger glandular hairs; tube cup-shaped; lobes appressed to corolla, triangular, ca. 2 × 1.3 mm, entire and lacking membranous margins, with a raised midline; **corolla** 2-lipped, subequally 4-lobed, mostly 30–35 mm long, in bud scarlet (orangish red), exposed portion short-pilose but not glandular-hairy on outer (lower) surface; tube narrowly barrel-shaped expanded around ovary and smooth, ± 4 × 2.7 mm, whitish with yellowish veins aging pale green but scarlet at top and drying pale orange, serving as nectar chamber; throat with veins, furrows, and ribs, constricted at top of tube and gradually enlarged upward, outer

surface somewhat glossy, inner surface scarlet and lower portion orangish yellow and densely nonglandular short hairs (colorless to red) above nectar chamber, especially upper portion with scattered minute glandular hairs; upper lip 1-lobed, spreading and arching, oblong-elliptic, 10–13 × 3.5–4 mm (flattened), somewhat hoodlike at tip (not notched), not flat (somewhat pouched), upper surface lacking hairs; lower lip 3-lobed, oblong-elliptic, 10–13 × 3–3.6 mm, flat with midvein raised on lower surface, somewhat hoodlike at tip, central lobe arching forward, lateral lobes arching and widely spreading ($\pm 180^\circ$), upper surface color solid (lacking nectar guides) lacking hairs; **stamens** 2, fused to corolla throat below sinuses and decumbent on throat; filaments free portion exerted lateral to central style, cylindric, ca. 11 × 0.4 mm, scarlet, lacking hairs; anthers dorsifixed, dithecal, sacs equal, 2–2.3 mm long, scarlet, longitudinally and toward the center dehiscent; pollen orangish yellow; **nectary disc** conspicuous beneath ovary, 0.4–0.5 mm long, light green, with copious thin nectar; **pistil** 1; ovary superior, torso-shaped, 1.5 × 0.7 × 0.6 mm, light green, glabrous, 2-chambered, each chamber with 2 ovules; style slender cylindric and straight, 27–30 × 0.2 mm, > anthers, light salmon at base and pink-rose to pale rose above, glabrous, at tip stigma capitate with 2 unequal rounded lobes to 0.4 mm long, pale rose. **Fruit:** capsule, loculicidal, 2-valved, dehiscent suddenly from tip nearly to base with divergent valves, 2(–3, rarely 4)-seeded, club-shaped with acute tip, 14–17 × 6–7 × 3–3.5 mm, brown, lower portion 4-sided, stipelike and slightly tapered to base, upper portion with seeds ovate-subspheeroid and biconvex, glabrous, with seeds vertically erect and parallel to septum. **Seed:** disclike and \pm heart-shaped, convex on 1 side, 4.2–5 × 4–5.5 × 1.5 mm, brown, asymmetric at base and notched where attached to funiculus, cupped from vase to below midpoint by a crescent-shaped structure (retinaculum), minutely bumpy especially close to margins (verrucose).

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