

Vascular Plants of Williamson County

Convolvulus arvensis – FIELD BINDWEED, ORCHARD MORNING GLORY [Convolvulaceae]

Convolvulus arvensis L., FIELD BINDWEED, ORCHARD MORNING GLORY. Perennial herbaceous vine, twining, deep-taprooted and with fleshy belowground caudex, several-many-stemmed at base, long branches often unbranched, twining on itself and surrounding plants to prostrate and trailing on bare ground; shoots with only cauline leaves, flexible-stemmed, in range essentially glabrous; latex milky. **Stems:** ridged, 1–1.5 mm in diameter, with 2 conspicuous ridges descending from each leaf, green, tough, when young with few short hairs. **Leaves:** helically alternate, simple, petiolate, without stipules; petiole V-channeled, 2–16 mm long; blade oblong to narrowly ovate or lanceolate, 15–50 × 7–25 mm, with spreading lobes (hastate) to arrow-shaped at base (sagittate), entire to inconspicuously crenate on margins, rounded to acute at tip, pinnately veined with principal veins slightly sunken on upper surface and raised on lower surface, dull. **Inflorescence:** cyme reduced to 1 or 2 flowers, axillary, erect, bracteate, appearing glabrous or with some short hairs; peduncle at anthesis 10–50 mm long, turned upright abruptly at base; bractlets 2, subopposite, the lower bractlet subtending first pedicel, the upper bractlet subtending second pedicel (if present), narrowly oblong to oblanceolate, 2.1–4 × 0.8–1 mm, minutely ciliate on colorless margins, persistent; pedicel initially erect, 5–13 mm long, flexible, becoming stiff and arched to strongly deflexed in fruit. **Flower:** bisexual, radial, in range 21–30 mm across; pleated in bud; **sepals** 5, ± free, overlapping, unequal, cupped-circular or cupped-obovate to cupped-oblong, 3–4.3 × 2–4 mm, green and thick-membranous or upper margin reddish, stiff, rounded to truncate or slightly notched at tip with central point, above midpoint membranous margin often ciliate to fringed, in fruit thick-based, tightly appressed, and aging reddish; **corolla** shallowly 5-lobed, broadly funnel-shaped, 15–20 mm long, thin, internally glossy green near base with pigment showing through to outer surface, mostly white or creamy white on upper inside (outside potentially pink or light purple on outer sectors exposed to sunlight in bud), sparsely short-hairy on pigmented sectors; lobes wide and very short, dull; **stamens** 5, fused to base of floral tube for 1–2 mm; free portion of filament arched, (4–)5–7.3 mm long, thick and wide at base, abruptly narrowed and tapered at tip, pale green and whitish at tip, with conspicuous glandular hairs on base; anthers included, dorsifixed, dithecal, in range ± 2.3 mm long, light purple, longitudinally dehiscent; pollen colorless; **nectary** cupped around ovary base, crownlike with 5 unequal lobes, 0.5–0.7 × 1.3–1.4 mm, yellow-orange; **pistil** 1; ovary superior, conic, ± 1–1.5 mm long, white, 2-chambered, each chamber with 2 ovules attached to base; style slender, 8–10 mm long, white, with 2 included, spreading to ascending, stigmatic, sausage-shaped, 3–3.8 mm long, white. **Fruit:** capsule, indehiscent, 2–4-seeded, ± spheroid, 7–9 × 6.5–7.5 mm, tannish brown, leathery, with persistent style base forming a point, empty beneath tip where mature seeds not filling chamber; septum translucent. **Seed:** obovoid, 4–5 × 2–3 mm long (larger when immature), dull dark brown, with minute, granular surface and conspicuous, rounded, lighter brown protuberances on all faces, ± obtusely angled on inner face or not (when 2-seeded), convex on outward face, when 4-seeded slightly concave on 2 faces; hilum on oblique tip, rectangular, light brown. A. C. Gibson & B. A. Prigge