

Vascular Plants of Williamson County

Argemone albiflora var. *texana* – WHITE PRICKLY POPPY [Papaveraceae]

Argemone albiflora Hornem. var. *texana* G. B. Ownbey, WHITE PRICKLY POPPY. Annual (in range), robust, spinescent, taprooted, rosetted, 1-stemmed at base, with ascending to spreading branches in flowering canopy, erect, in range < 50–95 cm tall; shoots with basal leaves and cauline leaves, sharply prickly especially on leaves, basal leaves increasing upward from 50 mm long to 2–4×, foliage and stems conspicuously glaucous, upper surface of leaves more green but with conspicuous light gray veins and lacking prickles, lower surface with prickles along principal and some minor veins, the prickles with swollen, conic bases leaning backward, tapered to sharp tip, whitish and pale green (base); in range latex light yellow; taproot aging woody, to 23 mm diameter, covered with leathery, brown bark. **Stems:** ± cylindric or having a broad, low ridge, to 19 mm diameter, with ridge descending from a major cauline leaf, mostly conspicuously glaucous blue-green, sparsely prickly with prickles 0–3 cm⁻², 2–4.5(–7) mm long. **Leaves:** helically alternate, deeply pinnately lobed with sinuses 4–20+ mm from midrib and lobes alternate to ± paired and widely spreading, < 10–100 mm long and to 60 mm wide, the longest lobes midblade or just above midblade, petiolate (basal leaves only) and sessile and ± clasping to fused with stem (all cauline leaves), without stipules; petiole < 20 mm long, indistinct from blade, flared and flattish at base, typically lacking prickles; blade of basal leaves and cauline leaves obovate to broadly elliptic in outline, 40–365 × 35–200 mm, lower portion appearing winged, principal lobes asymmetric with midvein closer to leading edge and with shallow, wavy sublobes, principal veins ending in dentate teeth with spine tips 1–2.5 mm long, pinnately veined with midrib and principal lateral veins raised on lower surface, with secondary veins diverging at ± 45°, prickles mostly restricted to midrib and principal lateral veins on lower surfaces, with prickles leaning backward. **Inflorescence:** leafy cyme, spinescent, of 1–3 broad flowers, terminal on each canopy branch, bracteate, glaucous, prickly, releasing latex when damaged; flowering branches initially densely clustered and spreading-ascending, repeatedly forked, each axis subtended by a spinescent, leaflike bract, when first flower formed bracts subtending pedicel appearing 2 and subopposite, but each a bractlet of a different flower in the cyme; bractlet subtending terminal flower ca. 30–35 mm long, often pinnately 5-lobed or 7-lobed, prickly; pedicel erect, cylindric, to 5 mm long, prickly. **Flower:** bisexual, radial, mostly 90–115 mm across; receptacle ca. 7 mm across; bud with 3 “horns” at tip; **sepals** 3, falling off as soon as flower opens (caducous), obovate, 28–33 × 15–17 mm, green, hooded at tip, with ca. 9 veined at base, sepals asymmetric at tip with the overlapping margin extending as an ear-shaped, membranous lobe beyond the normal tip, membranous tissue veiny, green surface densely prickly, the prickles to 9 mm long but having shorter prickles at base and longer approaching top, the longest prickles often branched with lateral prickles to 2.5 mm long, the horn subterminal, compressed front-to-back and hollow, to 10 mm long, with prickles on sides of only at top; **petals** (5–)6 in 2 whorls, spreading to form dish-shaped corolla, obovate to fan-shaped, 54–65 × 56–73 mm, of lower whorl narrower than of upper whorl, white, with many veins radiating from base and raised on upper surface, somewhat crinkled but not crumpled, entire along broadly tapered base, minutely short-crenate on outer margin, round to round-truncate at tip, glabrous, easily abscised and wilted; **stamens**

200–250, helically alternate in 6–7 series, free on raised receptacle (torus), yellow stamen mass ca. 15 mm across; filaments ascending and radiating, 7.5–12.5 mm long, 0.2 mm wide at base expanding slightly to 0.4 mm near tip, narrowly constricted below anther, yellow but white at base; anthers basifixed, dithecal, linear, 4.8–5.9 × 0.8–1 mm, strong yellow, longitudinally dehiscent; pollen strong yellow; **pistil** 1, ca. 15 mm long; ovary superior, ovoid, 10–13 × 5.5–6 mm, green but glaucous, densely covered with erect to suberect-ascending prickles, the prickles mixed 2–7 mm long, white and yellowish, 1-chambered of (3–)4(–5) units (carpels), each unit with many ovules attached to outer wall (parietal placentation); style short; stigma (3–)4(–5)-lobed, descending and appressed to top of ovary, the lobes inversely fan-shaped to spatulate, 1.5–3 × 2 mm, deep purple (blackish; in bud pink and rose) but pale purple on other surface, papillate, the expanded portions touching adjacent lobe and forming a notch or hole between claws of adjacent stigma lobes. **Fruit:** capsule (ceratium), dehiscent at tip typically by 4 valves, erect, prickly, many-seeded, narrowly ovoid when young often becoming oblong-ellipsoid to ellipsoid before dehiscent, 40–45 mm long, diameter to 15 mm midfruit (excluding prickles), deeply grooved over sutures, valves ascending to spreading, narrowly triangular, ca. 10 mm long, with inrolled margins, glaucous, veiny on inner surface, separating from framework of 4 fibrous strands of placenta (replum) arched above chamber and typically fused at tip by persistent style and stigma (breaking apart later); prickles spreading and ascending, thick at base tapered to sharp tip, straw-colored, unequal and mixed, 2–12 mm long, the larger ones somewhat compressed side-to-side. **Seed:** D-shaped to subspheroid with short point at top, in range 1.7–2.1 × 1.7–1.9 mm, satiny black, with aril forming 2 points on 1 side; seed coat when fresh with vertical rows of large convex cells, when dry appearing pitted because cells collapse and become concave with raised cell boundaries.

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