Vascular Plants of Williamson County

Pavonia lasiopetala – TEXAS ROCK-ROSE, WRIGHT PAVONIA [Malvaceae]

Pavonia lasiopetala Scheele, TEXAS ROCK-ROSE, WRIGHT PAVONIA. Shrub, semievergreen, many-stemmed at base, principal branches spreading to ascending having relatively short lateral branches with flowers and fruits, in range to 80 cm tall (taller in cultivated specimens); shoots with only cauline leaves, foliage velveteen with stellate hairs having to 8 arms from a short base, having inconspicuous glandular hairs. Stems: cylindric, tough, initially green or aging red, stellate-hairy and with inconspicuous glandular hairs, young twigs woody with stellate hairs, lower branches with light tan bark having small blisterlike lenticels and without hairs. **Leaves:** helically alternate, simple (rarely with 1–2 shallow lobes above midblade), petiolate, with stipules; stipules 3, attached to node at base of petiole, ascending, narrowly triangular-linear, $2.2-3 \times 0.4-1.2$ mm, green, having simple hairs and stellate hairs with few arms, base somewhat persistent; petiole cylindric, 5–42 mm long, scaling with blade, flexible, green to red, densely stellate hairy; blade ovate, in range $< 12-49 \times < 9-38$ mm, > petiole, densely stellate-hairy, cordate at base, low-dentate to dentate on margins, acute at tip, 3, 5, or 7-veined at base pinnately veined above base having principal veins slightly raised on upper surface and minor veins slightly sunken and most veins raised on lower surface, stellate-hairy and with minute glandular hairs, upper surface hairs less dense. Inflorescence: flower solitary, axillary, bracteate, stellate-hairy; pedicel cylindric, to 17 × 0.5–0.7 mm, < petiole, flexible, green or strawberry-red, with minute colorless glandular hairs, with 5-7 subequal bracteoles at top touching calyx, bracteoles calyxlike (epicalyx), fused in short disc at base, each bracteole widely spreading, linear long-tapered, $6-15 \times 0.8-1.2$ mm, green or with red-purple margins and tip, stellate-hairy and with inconspicuous glandular hairs. Flower: bisexual, radial, \pm 30 mm across; calyx 5-lobed, green, outer surface stellate-hairy; tube platelike, to 2 mm long; lobes spreading at anthesis, \pm ovate, $6-9.4 \times 3.5-5$ mm, green, 5veined with principal veins raised on lower (outer) surface, entire, acute at tip, inner surface glabrous below midpoint and with unbranched nonglandular hairs and minute glandular hairs above midpoint; **nectary disc** on base of calyx, ca. 0.5 mm long, puberulent, producing copious nectar before anthesis between calyx and corolla; corolla 5lobed (petals), lobes twisted in bud, lower portion fused around ovary; tube white, glabrous; lobes widely spreading, fan-shaped, $12-16 \times 11-13$ mm, white at base but rose above, stellate-ciliate on lower portion of margins, palmately veined mostly with 11 principal veins raised on lower surface, upper surface with short glandular hairs above midpoint, lower surface with scattered stellate hairs and inconspicuous glandular hairs; stamens 20–25, monadelphous (fused into a column) and fused to base of corolla; column cylindric, 7–7.5 mm long, pale pink at base and white with pink at top including several short, triangular appendages, radiating filaments 5 below 1/3 of column, others approaching top, solitary or forked into 2 filaments, 2.5–3 mm long, white to pale pink; anthers dorsifixed, monothecal, ca. 1.3 mm long, yellow to orangish yellow, longitudinally dehiscent; pollen orangish yellow; **pistil** 1; ovary superior, conspicuously 5-lobed, 1.2–1.5 × 2–2.5 mm, light yellow-green, the lobes scarcely fused on inner side, with faint midridge, glabrous, 5-chambered, each chamber with 1 ovule attached to center; style in depressed between lobes of ovary, 10-branched, lower portion erect and cylindric (within

staminal column), ca. 7 mm long, greenish only at base and white above, pale pink at bases of branches, branches suberect at anthesis aging curved to coiled, slender, 4.5-6 mm long; stigma terminal, short, conspicuously papillate. **Fruit:** schizocarp, 7.5-8.2 mm across, of 5 dry, 1-seeded segments (mericarps; sometimes 1 mericarp undeveloped or injured by predator), septicidal, sides mostly free, attached to central axis; mericarps achenelike and indehiscent, plump D-shaped, $3.5-4 \times 2.5-3.1 \times 2.5-3$ mm, brown to red-brown, with slender midridge on back and a pair of oblique scars on sides next to line of attachment (former weak fusion with adjacent chamber), mostly not veiny, hard and thick-walled, the wall 0.3 mm thick. **Seed:** kidney-shaped, ca. $2.8 \times 2.2 \times 2.2$ mm, light orange-brown, with tufts of short hairs next to indented hilum; calyx lobes cupped around mericarps and often tips touching over and concealing fruit; bracteoles spreading to ascending.

White-flowered cultivar escaped in woodland at Berry Springs Park & Preserve, Georgetown.

Leaves: helically alternate, simple, petiolate with pulvini, with stipules; stipules 2, attached to node at base of leaf, linear, 2.5-3.5 mm long, purple-red, short stellate-pubescent; petiole pulvinus at base to 2 mm long, above pulvinus cylindric, terminal pulvinus 2-2.5 mm long; blade \pm triangular or with widely spreading basal lobes, to 60×30 mm, truncate to subcordate at base, low-crenate on margins, broadly acute at tip, \pm palmately veined at base but midrib with pinnate venation with minor veins sunken on upper surface and most veins raised on lower surface, upper surface with scattered short stellate hairs along veins with arms appressed, crystal aggregates (druses) visible in leaf mesophyll, lower surface uniformly pubescent with closely spaced, overlapping stellate hairs.

Bracteoles fused to calvx tube, acute-ovate, ca. 5.5×3.2 mm, whitish at base and green above, 7-veined or 9-veined at base, surfaces short stellate-hairy. Flower: bisexual, radial, ca. 50 mm across; calvx 5-lobed; tube cup-shaped, ca. 3.5 mm long, whitish and greenish, 1-veined, purplish red veins raised especially to sinuses; lobes acute-ovate, ca. 6×4.5 mm, finely 5-veined; **petals** 5, obovate, ca. 20 × 17 mm, white with scarlet to crimson lower 1/4 and principal veins to midpoint, 9-veined or 11-veined, on lower surface tissue with scattered, colorless short hairs; **stamens** ca. 25, monadelphous (fused into a column); column cylindric, $10-12 \times 1-1.2$ mm, scarlet, with radiating filaments, 1-2.5 mm long, scarlet aging deep purple, with scattered glandular hairs; anthers dorsifixed, monothecal, ca. 1.3 mm long, deep purple, longitudinally dehiscent; pollen yellow-orange; **pistil** 1, 16–17 mm long; ovary superior, conspicuously 5-lobed, ca. 2 × 2.5 mm, light yellowgreen, the lobes scarcely fused on inner side, with faint midridge, short-villous (unbranched hairs), 5-chambered, each chamber with 1 ovule attached to center; style in depressed between lobes of ovary, 10-branched, lower portion erect and cylindric (within staminal column), greenish only at base and becoming orangish above, the branches arising 1 mm above ovary, slender, exserted 4–5 mm above staminal column; stigma terminal, 0.4 mm across, conspicuously papillate. **Fruit:** schizocarp, of 5 dry, 1-seeded segments (mericarps; sometimes 1 mericarp undeveloped or injured by predator), septicidal, sides mostly free, attached to central axis; mericarps achenelike and indehiscent, plump D-

shaped, $5-5.5\times3$, brown to red-brown, with conspicuous midridge on back and raised network on sides, hard and thick-walled, the wall 0.3 mm thick. A. C. Gibson