Vascular Plants of Williamson County Oenothera suffrutescens — SCARLET GAURA [Onagraceae]

Oenothera suffrutescens (Séringe) W. L. Wagner & Hoch (syn. Gaura coccinea), SCARLET GAURA. Subshrub, having deciduous canopy shoots, with bark-covered, woody lower stems, thick-taprooted, only after germination rosetted (not observed), highly branched in canopy, several-stemmed at base, principal branches spreading, in range to 40 cm tall; shoots typically with only cauline leaves (basal leaves only at the beginning of year 1), along axes and clustered at node on unexpanded axillary shoots, canopy leaves with comparatively short, narrow leaves, uniformly pubescent with appressed or upwardcurving, short, stiff hairs, lacking glandular hairs. **Stems:** cylindric to ridged, canopy stems slender, green, densely short-hairy; basal stem to 4 mm diameter, woody, bark brown not peeling. Leaves: helically alternate, simple, subsessile, without stipules; petiole < 1 mm long; cauline blade oblong to elliptic or lanceolate, mostly $5-15 \times 1-3$ mm, long-tapered at base, entire, acute with callous tip, the callous often crimson [basal leaves longer and wider having broadly spaced, coarse teeth], pinnately veined with the midrib slightly sunken on upper surface and raised on lower surface. **Inflorescence:** spike, terminal, many-flowered, 1 flower per spike opening after sunset, bracteate, short-hairy; rachis cylindric, < 1 mm diameter, short-strigose with upward-pointing hairs; bractlet subtending flower acute-obovate short-petiolate, $2.5-3 \times 0.9$ mm, green with white petiole < 0.4 mm long, 1-veined; pedicel short and indistinct from ovary, enlarging in fruit. Flower: bisexual, bilateral, in range ca. 13 mm across (flowers on the small end for range of species for all features), sweetly fragrant at night; hypanthium 4-sided tube on top of ovary, in range ca. 4×1 mm including slight bulge at base = nectary chamber and slightly flared at top, with 4 crimson ribs, outside short-hairy, inside with **nectaries** lining chamber 1.5 mm long at base and pubescence above midpoint, chamber filled with thin nectar; sepals 4, arising from rim of hypanthium, tips free in bud and sepals becoming completely separated and reflexed, triangular, in range ca. 6×1.2 mm, green and cream-colored, blunt-acute at tip, in bud pubescent on outer (lower) surface and glabrous on inner (upper) surface; petals 4, arising on rim of hypanthium, white aging to rose or red, all positioned widely spreading on upper half of flower, clawed, ca. 6 mm long, claw $1.6 - 2 \times 0.4$ mm, limb oval, in range ca. 4×3 mm, glabrous; **stamens** 8 appearing in 1 set, free, arising as ring from hypanthium rim; filaments slightly dimorphic, ca. 3×0.3 mm (opposite sepals) and ca. 4×0.2 mm (opposite petals), each with a greenish appendage attached to base of filament on inner side, the appendage often truncate to 0.3 mm long; anthers monomorphic, versatile, dithecal, ca. 2.5 mm long, crimson and yellowish, longitudinally dehiscent; pollen pale yellow, pollen grains 3-pointed, held in a mass by minute threads by minute threads (viscin threads); **pistil** 1; ovary inferior, columnar 4-sided, in range $5-6 \times 1$ mm, light green, short-hairy with upward arching hairs, appearing 1-chambered with 4 ovules; style cylindric with lower portion concealed within hypanthium, in range ca. 10 mm long, green within hypanthium and exposed portion white, glabrous, 4-lobed at top, the stigmatic lobes spreading, fleshy conic-pyramidal, 0.7–0.8 mm long, greenish. Fruit: nutlike, indehiscent, to 4-seeded in central "chamber," pyramidal 4-angled, ca. $5 \times 1.5-3$ mm with stout, ridged base (pedicel). **Seed:** ovoid, $1.5-3 \times 1-1.5$ mm, light brown to reddish brown, smooth to minutely bumpy.

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