

Vascular Plants of Williamson County

Symphotrichum patens var. *patens* – LATE PURPLE ASTER, SPREADING ASTER, CLASPING ASTER [Asteraceae]

Symphotrichum patens (Aiton) G. L. Nesom var. *patens*, LATE PURPLE ASTER, SPREADING ASTER, CLASPING ASTER. Perennial herb, with taprooted caudex, not rosetted, 1–several-stemmed at base, decumbent or with ascending branches, in range to 40 cm tall; shoots with only cauline leaves at flowering, all leaves sessile and clasping stem, in canopy leaves much smaller, short-hirsute (hirtellous) and short-strigose and with colorless, stalked glandular hairs, not viscid. **Stems:** cylindric, to 3 mm diameter, finely striped with 3 pinkish veins descending from each leaf, hirtellous with upward-pointing hairs and scattered stalked, colorless glandular hairs. **Leaves:** helically alternate, simple and sessile with clasping basal lobes, without stipules; blade of lower leaves elliptic to lanceolate, mostly 30–70 × 10–30 mm, subcordate to cordate at base with rounded lobes touching or partially encircling stem at node to 0.7 mm wide, entire with scabrous hairs having enlarged bases on margins, acute at tip, pinnately veined with midrib raised on lower surface, surfaces with conspicuous, nongreen vein network and short-hairs; blade of upper canopy to 7 × 2 mm, mostly appressed. **Inflorescence:** heads, in terminal, paniclelike arrays of several heads, on axes with reduced leaves, head raduatem 20–32 mm across, of 15–22+ pistillate ray flowers and to 35 bisexual disc flowers, bracteate; peduncle short-hirsute and with stalked glandular hairs, with 1–6 ascending to spreading, sessile, awl-shaped bracts, bracts ± keeled, < 3 mm long, green and whitish, not clasping, blunt-acute at tip, bracts at each fork and gradually reduced to involucre; **involucre** bell-shaped, 5.5–7 × 5–5.5 mm, phyllaries to 40 in 4–5 series, 1-veined, exposed surfaces with short hairs and glandular hairs especially above midpoint and with purplish tips, outer phyllaries ovate-lanceolate, 2–3 × 0.8 mm and midvein purplish above midpoint, middle and oblong inner phyllaries increasing to 5.5 mm long and 1–1.2 mm wide, below midpoint whitish with green to greenish center mostly glabrous or sparsely short-strigose, phyllaries thickened at base and firmly attached; receptacle flat, lacking bractlets (paleae), each ovary surrounded by a crown of acuminate lobes to 0.8 mm long. **Ray flower:** bilateral, ca. 2 mm across; **calyx (pappus)** capillary bristles, 40–55 in ca. 2 close series, at anthesis 3–5 mm long increasing to 5–6.5 mm long, white aging pale tawny; **corolla** acute; tube cylindric, ± 1.5 × 0.4 mm, translucent; limb widely spreading, oblanceolate-linear, 9–12+ × 1.2–1.7 mm, aging 2-coiled under, lower portion whitish, upper portion light lavender-violet, limb with some short, weak hairs on lower surface; **stamens** absent; **pistil** 1; ovary inferior, inversely pyramidal, 0.8–1 × 0.5 mm, densely short-hairy with ascending hairs, 1-chambered with 1 ovule; **nectary disc** surrounding base of style, short; style 3.5–4 mm long, 2-branched, colorless to midpoint of branches and yellow above, branches exerted, above midpoint. **Disc flower:** radial, ca. 1 mm across; **calyx (pappus)** capillary bristles, 40–55 in ca. 2 close series, at anthesis 3–5 mm long increasing to 5–6.5 mm long, white aging pale tawny; **corolla** 5-lobed, 5–5.5 mm long; tube cylindric, ± 1.5 × 0.4 mm, translucent; throat very narrowly funnel-shaped, colorless changing to yellowish at top, 5-veined to sinuses; lobes triangular, 0.7–0.8 mm long, bright yellow, in bud with unicellular hairs; **stamens** 5, attached at top of corolla tube; filaments 1.5 mm long, colorless; anthers fused into cylinder surrounding style, basifixed, bisexual, with appendages exerted, 2.5 mm long

including acuminate appendages, bright yellow, longitudinally and internally dehiscent; pollen bright yellow; **pistil** 1; ovary inferior, inversely pyramidal, 0.8–1 × 0.5 mm, densely short-hairy with ascending hairs, 1-chambered with 1 ovule; **nectary disc** surrounding base of style, short; style ca. 4.5 mm long, 2-branched, colorless to midpoint of branches and yellow above, branches exserted, ± 1.4 mm long, conspicuously papillate and bright yellow above midpoint. **pistil** 1; ovary inferior, inversely pyramidal, 0.8–1 × 0.5 mm, densely short-hairy with ascending hairs, 1-chambered with 1 ovule; nectary disc surrounding base of style, short; style 3.5–4 mm long, 2-branched, colorless to midpoint of branches and yellow above, branches exserted, above midpoint. **Fruits:** cypselae (achenes), with permanent pappus, monomorphic, when fertile fusiform and often 5-ribbed, ± 2 × 0.6 mm, light brown, short-strigose with upward-pointing hairs; pappus capillary bristles ascending, mostly 6–6.5(–7.5) mm long, pale tawny, straight but often sharply bent at tip.

A. C. Gibson