

Vascular Plants of Williamson County

Chenopodium berlandieri var. *zschackei* – PITSEED GOOSEFOOT [Chenopodiaceae]

Chenopodium berlandieri Moquin-Tandon var. *zschackei* (Murray) Graebn., PITSEED GOOSEFOOT. Annual, taprooted, 1–several-stemmed at base, erect with spreading to ascending lateral branches at successive nodes, 55–150 cm tall; shoots with only cauline leaves, having short, grayish, turgid hairs becoming powdery (farinose), not scented (mildly ill-smelling when crushed). **Stems:** 5-angled when young and strongly ridged aging cylindric, to 15 mm diameter, with 3 ridges descending from each leaf, tough, striped often with 10 pale yellow or pinkish to purplish red strands separated by green, initially densely coated (farinose). **Leaves:** helically alternate, simple, petiolate, without stipules; petiole channeled at least to midpoint, in range 3–80 mm long, scaling with blade length, tough, ridged upper portion and on lower side base-to-tip, farinose; blade rhombate to triangular or ovate to lanceolate (small leaves), typically 11–70 × 5–65 mm, broadly tapered or truncate to tapered at base, entire or irregularly dentate to coarsely serrate on margins (to 13 teeth per edge with rounded sinuses) or sometimes short-lobed at the lateral angle of rhombic leaves, acute (acuminate) at tip, pinnately veined having 3 principal veins at base with midrib raised on upper surface and principal veins raised on lower surface, densely farinose, upper surface becoming sparsely to moderately farinose and dull green, lower surface remaining densely farinose and sometime glaucous gray. **Inflorescence:** dense spikelike panicle of helically arranged flower clusters (glomes), terminal and axillary on main and ascending lateral shoots, mostly erect, 50–650 mm long, lateral branches 10–30 mm long having 7–15 glomes spaced or congested along axis, glome subspheroid, 3–7 mm having 3–10 sessile flowers, farinose on axes, bracts, and flowers; bract subtending lateral branch leaflike, with petiole to 6.5 mm long, the blade lanceolate to elliptic or ovate, (7–)11.5–33 × (1–)6–11 mm, entire to dentate on margins, 1-veined or 3-veined at base, farinose, often early-deciduous; bract subtending glome sessile to short-petiolate, linear to linear-fusiform or elliptic to rhombic, 3.5–11.5 × 0.3–4 mm, tapered to long-tapered at base, acute to acuminate at tip; bractlet subtending flower absent. **Flower:** bisexual or sometimes pistillate (mostly terminal flowers or late in season), radial, ± 1.4 mm across (1.6–2.3 mm across in fruit), nonshowy; **calyx** 5-lobed, 5-sided with lobes arched inward over stamens and pistil; tube saucer-shaped; lobes subequal, triangular to oblong, 0.7–1.2 × 0.6–1 mm, acute to obtuse at ± hooded tip (sometimes aging notched), green and thick along broadly keeled midvein, white-membranous or pinkish on margins, farinose on outer (lower) surface, tightly incurved and later concealing developing fruit, spreading and releasing mature fruit; **stamens** 5, fused at base into a saucer-shaped tube ca. 0.5 mm diameter, opposite calyx tubes; filaments free portion flat, tapered from base-to-tip, 1–1.1 mm long, whitish to pale green; anthers dorsifixed, dithecal, ca. 0.4 mm long, length < width, yellow, with ellipsoid sacs, connected by a short connective, longitudinally dehiscent; pollen yellow-orange; **pistil** 1, 0.5–0.8 mm long; ovary superior, ± spheroid, 0.3–0.5 mm, light green to yellowish green, surface cobblestonelike with minute, domed cells (colliculate), 1-chambered with 1 ovule; style 2-branched, below fork 0.05–0.3 mm and yellow-green, the branches exerted, 0.3–0.6 mm long, light yellow, stigmatic-hairy fork to tip. **Fruit:** achene (utricle), indehiscent with fruit wall adherent to seed when dry, horizontal, thick-lenticular, 1.1–1.5 mm diameter, dark brown to blackish; seed often with

a light, slightly arched streak from base to tip of radicle, sometimes yellowish or cinnamon at base of style (at separation of pericarp from seed), becoming \pm honeycombed as domed cells collapse and are concave when dry.

A. C. Gibson