

*Portulaca* L. PURSLANE

*Portulaca oleracea* L., COMMON PURSLANE. Annual, taprooted, 1–many-stemmed at base, often matlike, branching at flowering nodes, paired branches slightly unequal, spreading and  $\pm$  prostrate, 3–25 cm tall; shoots fleshy, essentially glabrous. **Stems:** cylindric to shallowly ridged, 1–4 mm diameter distally, to 8 mm diameter at plant base, the shallow grooves defined by decurrent leaf bases on young stems, green but often tinged rose to magenta on exposed surfaces; with a circular groove at the cotyledonary node. **Leaves:** alternate to  $\pm$  opposite, simple, short-petiolate, without stipules; petiole channeled at base but hemicylindric approaching blade, 1–3.5 mm long, fleshy, tinged pink to rose, at base with an abscission groove on lower side, sometimes with colorless hairs or jagged scales  $\pm$  lateral to petiole base or concealed in axil of petiole; blade obovate or spatulate to oblong, 5–26.5  $\times$  3–18 mm, 0.7–1.5 mm thick, broadly tapered at base, entire, rounded to truncate at tip, faintly veined with part of midrib and sometimes lateral veins evident on lower surface, upper surface dark green, transparent or reddish on margins. **Inflorescence:** leafy condensed cyme, terminal or axillary on short shoots, of 1–5 flowers subtended by 2–6 opposite leaves appearing involucrelike and eventually loosely surrounding cluster of fruits, flowers sessile to subsessile, bracteate, glabrous; bract + bractlets subtending flower 2 or 3, appressed to ovary, unequal, the outer bract broadly ovate, the inner bractlets lanceolate to awl-shaped, 3–5  $\times$  0.5–3 mm, membranous, purple to above midpoint to colorless or pinkish at tip and margins, tail-like at tip, appressed and scarious in fruit. **Flower:** bisexual, radial, when freshly open in morning 7–10 mm across but closing rapidly when stressed, sometimes not opening (cleistogamous); **calyx** of 2 unequal sepals fused at base and to lower portion of ovary, in bud the pair appearing like a lobster claw with broad membranous wings, green with wings rose to magenta, the outer lobe, < 5 mm long, larger and partially covering inner lobe, strongly keeled, the shorter inner lobe conspicuously compressed-keeled above midpoint; after flowering both lobes increasing and wrapped tightly around developing fruit thereby enclosing old petals and stamens; **petals** 5, spreading, oblong-obovate, 3–5.5  $\times$  1.5–3 mm, bright yellow, conspicuously notched at tip, upper (inner) surface glossy; **stamens** (6–)10–12(–20) in whorls or 5 or 6, free; filaments 1.6–2.3(–3) mm long, of the outer whorl slightly > inner stamens, yellow, with a tuft of papillate hairs at base; anthers dorsifixed, dithecal, 0.3–0.4 mm long, yellow, the sacs unequal, the longer chambers touching at tip, separated at base by a wedge-shaped connective, longitudinally dehiscent; pollen yellow; **pistil** 1, 4.5–5 mm long; ovary half-inferior, 2.5 mm long, exposed portion conic, 1 mm long, 1-chambered with many ovules attached to a basal post; style 2–2.5 mm long, yellow, 4-branched or 6-branched at midpoint, the branches ascending to spreading, stigmatic. **Fruit:** capsule (pyxis), with dehiscence around circumference (circumscissile), many-seeded, conic, to 8 mm  $\times$  3 mm, seeds attached via conspicuous funiculi to central, basal placentae. **Seed:** compressed snail-like, 0.6–1 mm wide, 0.35–0.5 mm thick, black to dark brown, finely warty, the bulging cells in rows along outer edge. Early May–early October.

Naturalized. A weedy annual most often observed in the vicinity of urban and cultivated areas but occurring in disturbed localities throughout the range. *Portulaca oleracea* has distinctive, fleshy, obovate leaves. Its bright yellow flowers are only open on sunny mornings and close as daily water stress progresses. The cap of the fruit dehisces around

the circumference at the base of the free portion (circumscissile dehiscence), exposing the seeds for local dispersal.

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