

Nasturtium officinale W. T. Aiton, WATERCRESS. Aquatic perennial herb, evergreen, rooting at nodes from leaf axils, many-stemmed at base, branched throughout, prostrate or decumbent, 20–50(–120) cm tall; shoots with basal leaves and cauline leaves, ± glabrous to sparsely puberulent with colorless, unbranched hairs. **Stems:** irregularly angled, to 15 mm diameter, with a ridge descending from each leaf, thick and somewhat fleshy, green often aging purplish, typically inconspicuously short-hirsute near axillary buds; hollow. **Leaves:** helically alternate, odd-1-pinnately compound, 40–350 × 25–90 mm, with 0–10 opposite or subopposite, sessile lateral leaflets or sometimes lower leaflets alternate (submersed juvenile leaves sometimes simple), petiolate, without stipules; petiole channeled, (3–)15–75 mm long, clasping with a pair of short, fleshy, earlike projections at base (auriculate), short-hirsute in channel; rachis channeled, short-hirsute in channel; blades of leaflets ovate to roundish (oblong), 5–65 × 3–35 mm, terminal leaflet the largest and symmetric, lateral leaflets typically asymmetric, rounded to cordate at ± sessile base, short-crenate to entire on margins, obtuse or rounded to acute at tip, ± pinnately veined with principal veins raised on both surfaces, having elongate, swollen (crystalline) cells along veins. **Inflorescence:** raceme, terminal on determinate lateral shoot with 1 leaf subtending raceme, in fruit up to 250 mm long, many-flowered, ± flat-topped with open flowers at or above level of buds, lacking bracts, essentially glabrous; bract subtending raceme = pinnately compound leaf; peduncle absent, the lowest pedicel typically arising at base; rachis low-ridged; bractlets absent; pedicel ascending, 4–5 mm long at anthesis, radiating to deflexed and increasing to 12–38 mm long in fruit, low-ridged, inconspicuously puberulent on upper side, occasionally with emerging adventitious roots in axil. **Flower:** bisexual, radial, 4–5 mm across; **sepals** 4, ascending, slightly dimorphic, narrowly oblong to ovate or obovate, 2–3 × 0.7–1.2 mm, somewhat inrolled, fleshy, green with narrow, whitish membranous margins at and near tip, of outer pair slightly pouchlike at base and attached lower on receptacle, deciduous after flowering; **petals** 4, clawed, spatulate, 3–5.5 mm long; claw 1.5–2.5 mm long, tapered to base, whitish sometimes aging pinkish; limb spreading, obovate, white, pinnately veined with veins faint and greenish becoming reddish; **stamens** 6, free, dimorphic with outer 2 short and inner 4 longer, short stamens included, long stamens slightly exerted; filaments ≤ sepals (short stamens) and ≥ sepal (long stamens), light green aging pinkish burgundy; anthers basifixed, dithecal, 0.5–0.6 mm long, yellow, ± arrow-shaped, longitudinally dehiscent; pollen light yellow; **nectaries** 2, each subtended by a short stamen, minute, 2-lobed, green; **pistil** 1, 2–4.5 mm long; ovary superior, straight cylindric, pale green becoming reddish and then again green, glabrous, fleshy, green with narrow, whitish membranous margins at and near tip, 2-chambered, each chamber with 2 rows of many ovules; style 0.5–0.7 mm long; stigma capitate, indistinctly 2-lobed with lobes ⊥ to septum. **Fruit:** siliqua (silique), dehiscent by 2 valves parallel to septum, many-seeded, ± cylindric, 10–17 × 2.2–3 mm, slightly bulging from seeds, glossy, with valve midvein obscure; beak ± 0.5 mm long; septum with midvein. **Seed:** compressed-roundish or ellipsoid to ovoid, 0.9–1.3 mm long, cinnamon brown, with netlike surface. January–December.

Native. An often creeping herb occurring throughout the range in shallow water and in mud where continuously wet, such as along margins of creeks and storm drains.

Nasturtium officinale is the oldest legitimate scientific name for this plant, which has also

been classified in the genus *Rorippa*. Watercress forms nodal adventitious roots from creeping and ascending stems, even above waterline, and, remarkably, short roots sometimes occur in the axils of fruit pedicels on emergent racemes. The somewhat fleshy, pinnately compound leaves are eaten in salads, but from the wild this is not advised because of poor water quality, especially where fed with farm runoff or sewage. Flowers of *Nasturtium officinale* are showy and white, and every week of the year somewhere in range can be found plants with flowers and immature fruits. The light-weight seeds are easily transported from one body of water to another, especially via waterfowl, which eat watercress. If varieties are recognized, ours would be the typical form.

It is possible that *N. gambelii* occurs in range; this species is more hairy and has narrower fruits, and would be expected only in near coastal habitats.

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