

## *Sisymbrium* L.

*Sisymbrium orientale* L., ORIENTAL MUSTARD. Annual, taprooted, rosetted, 1–several-stemmed at base, branched above or not, erect, in range 11–100+ cm tall; shoots with basal leaves and cauline leaves, leafy below inflorescence, moderately or densely pilose to villous, the hairs spreading or slightly reflexed and unbranched, to 1 mm long. **Stems:** ± cylindrical, to 7 mm diameter, green and sometimes minutely purplish red spotted in canopy, sometimes dark reddish purple to dark brownish red at shoot base, somewhat glossy, hairs often conspicuous without hand lens. **Leaves:** helically alternate, deeply pinnately lobed to compound (basal and lower cauline leaves) with sinuses incised to or near midrib and unlobed (the uppermost cauline leaves), petiolate, without stipules; petiole shallowly channeled, 10–140 mm long, typically dark reddish or dark purplish red; blade of basal and lower cauline leaves 30–200 × 15–90 mm, > petiole, lobes increasing in size from base to tip with a large terminal lobe 9–60 mm long, rachis 2-ridged or narrowly 2-winged, lateral lobes opposite to alternate, lanceolate or elliptic to ovate, asymmetric at base, often with a smaller, elevated basal lobe on trailing edge, lobes entire or with several teeth on margins, obtuse or acute to rounded at tip, pinnately veined with major veins raised somewhat on lower surface, soft-hairy; blade of the uppermost cauline leaves with 0–2 pair of lobes below midpoint, linear-oblongate to elliptic-linear, 35–80(–160) mm long, lobes linear or linear-lanceolate, < 30 × 4 mm long, entire to subentire and often wavy on margins, acute at tip, pinnately veined with midrib raised on lower surface, with widely scattered hairs. **Inflorescence:** raceme, terminal, many-flowered, somewhat flat-topped with open flowers overtapping flower buds, pilose; bract subtending peduncle leaflike, with or without basal lobes; peduncle cylindrical; bractlet sometimes subtending pedicel of the lowermost 2 flowers, leaflike, unlobed, linear-elliptic leaf but shorter and narrower than cauline leaf; pedicel ascending, at anthesis 3–4.5 mm long increasing to 5.5 mm in fruit, diameter = fruit diameter, pale green becoming dark green. **Flower:** bisexual, radial, 7–10 mm across; **sepals** 4, erect, ± equal, narrowly lanceolate-elliptic, 4–6 × 0.8–1.3 mm, the outer pair somewhat hooded at tip, green aging yellowish or outer hoods purplish, narrowly membranous on margins, 3-veined (lateral veins less conspicuous than midvein), pilose; **petals** 4, clawed, spatulate, 7–10 mm long, claw to 5 mm long, tapered to base, with light yellow midvein and membranous margins, limb narrowly obovate, 1.5–2.8 mm wide, light yellow, pinnately veined with veins raised slightly on lower surface and becoming orange; **stamens** 6, free, dimorphic with outer 2 short and inner 4 longer; filaments erect, 3.3–4.5 mm long (short stamens) and 5–6 mm long (longer stamens), greenish or whitish; anthers dorsifixed, dithecal, ca. 1.5 mm long, pale yellow, narrowly arrow-shaped at base, longitudinally dehiscent; pollen pale yellow; **nectary disc** mostly obscured by filaments, scalloped around bases of filaments (most pronounced at base of short stamens), dull green; **pistil** 1, 5–6 mm long with stigma at level of anthers of long stamens; ovary superior, ± cylindrical, straight, greenish, pilose or villous below midpoint, 2-chambered, each chamber with many ovules; style 0.5–1 mm long; stigma capitate, 2-lobed. **Fruit:** silique (silique), wide-spreading, many-seeded, dehiscent by 2 valves parallel to septum, linear and cylindrical, (35–)70–105 mm × 1–1.5 mm, straight to arching, sparsely short-pilose or villous on valves, with a pale vein on margins of each valve, with persistent style (beak); beak club-shaped or bulbous, 1–1.5 × 1–1.3 mm, seedless; pedicel

1.7–2 mm wide beneath fruit. **Seed:** ± rectangular, 0.9–1.1 × 0.7 mm, light brown, with prominent radicle along 1 edge. Late January–early May.

Naturalized. Annual fairly commonly observed at scattered locations in SMM and SH, and especially common in Griffith Park. *Sisymbrium orientale* has much showier flowers and longer fruits than the very common, weedy *S. irio*. Its flowers and fruits closely resemble *S. altissima*, which has very narrow leaf lobes.

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