

*Turritis glabra* L., TOWER MUSTARD. Biennial to perennial herb, taprooted, rosetted, 1–several-stemmed at base, typically unbranched above, erect, in range 80–180 cm tall; shoots leafy with basal leaves and many ± appressed, overlapping cauline leaves, the rosette not persisting, below 50 cm pubescent with unbranched hairs and short-stalked branched hairs having 2–3 arms, not appressed, above 50 cm glabrous and glaucous. **Stems:** cylindric, to 5 mm diameter, shortly ridged below each leaf, lower stem short-hirsute to spreading hairy, the hairs mostly unbranched (2-armed), upper stem smooth and glaucous; solid, pith white. **Leaves:** helically alternate, simple, 2–3× > internode, petiolate (basal leaves) and sessile and clasping (cauline leaves), without stipules; petiole winged and crescent-shaped in ×-section, to 45–55 mm long but grading into blade, with unbranched and branched hairs; blade oblanceolate (basal leaves) grading to lanceolate (cauline leaves), the basal leaves 140–210 × 20–50 mm, long-tapered at base, entire or dentate on margins, rounded to obtuse or acute at tip, pinnately veined, ± hirsute with mostly branched hairs; blade of cauline leaves 40–130 × 6–35 mm, progressively shorter, clasping lobes (auricles) at base ± acute, 5–12 mm long, with straight inner edge and an arching outer edge, entire, acute to acuminate at tip, pinnately veined with midrib raised on lower surface, glabrous except some with hairs along lower midrib near the base. **Inflorescence:** raceme or sometimes panicle with 1 or 2 lateral racemes at base of main raceme, terminal, erect, many-flowered, flowers densely clustered at tip with buds greenish yellow and ± flat-topped with open flowers at same level as buds, lacking bracts, glabrous; peduncle essentially absent; rachis glaucous where neighboring shoot; bractlets absent; pedicel at anthesis ascending and 4–7.5 mm long increasing to 2–3× and appressed in fruit, green. **Flower:** bisexual, ± radial, 5–6.5 mm across; **sepals** 4, opposite decussate (not whorled), erect, lanceolate, 3.5–4.5 × 1–1.2 mm, the lower pair slightly longer but extending to same level as upper pair, pale yellow but yellow-green at tip, readily abscising, cupped or hooded at tip (upper pair) or less so (lower pair), not keeled, 3-veined; **petals** 4, ascending with upper portion somewhat spreading, not clawed, oblanceolate, 4.7–6.2 × 1–1.5 mm, in range pale yellow, tapered at base, rounded to ± truncate or uneven at tip, pinnately veined; **stamens** 6, free, slightly dimorphic with 2 outer short and 4 inner slightly longer, < petal length; filaments erect, 3.5 mm long (short stamens) and 4–4.5 mm long (long stamens), whitish to pale yellow, gradually tapered from base; anthers dorsifixed and ± versatile, dithecal, 1.4–1.7 mm long, light yellow with a green connective, arrow-shaped at base, longitudinally dehiscent; pollen light yellow; **nectary disc** ± sinuous ridge occurring outside of short stamen and inside the 4 long stamens, dull green; **pistil** 1, with stigma exerted slightly prior to anthesis, light green and slightly darker at base; ovary superior, subcylindric and somewhat compressed ⊥ septum, with valves becoming reddish after pollination but aging green, glabrous, 2-chambered, each chamber with many ovules attached to 2 placentae; style absent; stigma capitate, at anthesis circular and obscurely 2-lobed, densely and minutely papillate. **Fruit:** siliqua (silique), dehiscent by 2 valves from base upward, many-seeded, ± erect, linear, 65–83 × 1–1.3 mm, valves tannish, straight, glabrous, seeds attached to septum along 2 placentae per chamber; beak absent. **Seed:** ± D-shaped with scarious wing, 0.8–1.3 mm long, orangish, flattened on septum side and ± convex on valve side, the wing 0.1–0.4 mm wide, uneven with the widest on the curved margin, the flat margin sometimes without wing. Late March–mid-June.

Native (possibly). Biennial or short-lived perennial herb growing in near-coastal canyons (SMM), in sunny openings adjacent to southern oak woodland. *Turritis glabra* was formerly treated as a species of *Arabis*; this species was named by Linnaeus and is very widespread, so it is difficult to determine whether tower mustard is native to southern California. Tower mustard is a distinctive plant, tall and typically unbranched, initially with a well-defined rosette and then with glaucous, ascending, overlapping, auriculate cauline leaves. Flowers are not particularly showy, but the inflorescence bears hundreds of long, straight, overlapping erect fruits, so that tower mustard cannot be confused with any other local mustard. A single plant produces many thousands of seeds, which are shed during summer months, but apparently not dispersing very far because the populations are small and extremely local.

B. A. Prigge & A. C. Gibson