

Tropidocarpum Hooker

Tropidocarpum gracile Hooker, DOBIE-POD. Annual, taprooted, rosetted, 1–several-stemmed at base, branched or unbranched, in range 3–15 cm tall; shoots with basal leaves and cauline leaves, densely to moderately hirsute with forked hairs, the hairs of 2 size classes, the long hairs \pm straight, 0.5–0.8 mm long, sometimes with a very short branch near midpoint, the shorter hairs $<$ 0.5 mm long, forked with equal branches. **Stems:** cylindric, to 1 mm diameter, green or soon becoming reddish, with radiating unbranched hairs. **Leaves:** helically alternate, pinnately dissected with 6–8 lobes per edge, petiolate grading to sessile bractlets, without stipules; petiole 1–4 mm long; blade oblanceolate, 20–60 \times 10–15 mm, axis 0.5–0.8 mm wide, the lowest lobes minute, 1–2 mm long and entire or toothed, the middle lobes \pm broadly ovate, 3–10 mm long and wide with sublobes broad and toothed at base and lanceolate at tip, the upper lobes linear, $<$ 15 mm long and entire or with 1–2 linear sublobes, inconspicuously pinnately veined. **Inflorescence:** terminal raceme or flowers solitary in axils, raceme several-flowered, open flower not overtopping the largest bud, bracteate, pilose and short-hirsute; bractlet subtending pedicel sessile, leaflike, oblanceolate to ovate, pinnately lobed, $<$ 12 mm long, with lobes 1–4 per edge, the lobes mostly ascending, linear, 1–4 mm \times 0.5–1 mm, increasing in length from base to tip, the terminal lobe 1–7 mm long; pedicel at anthesis 1.5–7 mm long increasing to 2 \times in fruit. **Flower:** bisexual, radial, 4–6 mm across; **sepals** 4, spreading, \pm lanceolate to elliptic, in range 2.2–3.4 \times 0.8–1 mm, light to yellowish green, narrowly membranous on margins, hirsute with forked hairs on outer surface, glabrous on inner surface, deciduous; **petals** 4, ascending, clawed; claw 0.6–0.7 mm long, yellowish; limb elliptic, 2.2–3.5 \times 1–1.7 mm, vivid yellow, pinnately veined; **stamens** 6, free, 2 outer and 4 in inner whorl, subequal; filaments erect, 1.9–2.5 mm long, bright yellow; anthers basifixed, dithecal, ovate arrow-shaped, 0.5–0.7 mm long, light yellowish, longitudinally dehiscent; pollen light yellow; **nectaries** obscure; **pistil** 1; ovary superior, narrowly oblong compressed \perp septum, 2.2–3.1 \times 0.8–1 \times 0.3–0.4 mm, yellowish green, densely covered with minute, colorless, downward-pointing, conic hairs, 2-chambered, each chamber with $<$ 15 ovules; style \pm 0.2 mm long; stigma capitate, flat on top, 0.6 mm wide. **Fruit:** siliqua (silique), erect to horizontal, 2-valved dehiscent from septum, ca. 25-seeded, linear, typically 40–50 \times 1.5–2 \times 0.7 mm, purplish red, flattened \perp septum plane, sometimes twisted 90 $^\circ$, valves rounded and often retaining seeds, short-strigose with unbranched, downward-pointed hairs; indented along septum. **Seed:** oblong, 1.4–1.6 \times 0.5–0.6 mm, dark brown, pitted-wrinkled; mucilaginous when wetted. Mid-February–late March.

Native. Annual rarely encountered in SMM and SH on very thin, hard soils, typically along ridgelines growing in full sun. *Tropidocarpum gracile* is a small ephemeral that blends in well with other annuals, and so is most easily detected around noon when its yellow flowers open for several hours. This mustard has branched hairs on shoots, pedicels, and sepals, and a bractlet subtends each pedicel; these are two relatively uncommon characters in the family. The siliqua, difficult to see when erect, is flattened at right angle to the plane of the septum, and sometimes is twisted at the base 90 $^\circ$. Another peculiar trait is that the septum can be indented, i.e., with narrow and wide sectors.

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