

*Brassica nigra* (L.) W. D. J. Koch, BLACK MUSTARD. Annual, robust, thick-taprooted, initially rosetted but internodes elongating so when flowering lower leaves instead appear cauline, 1(–several)-stemmed at base, on large plants branched throughout, erect with ascending inflorescences, 40–310 cm tall; shoots with basal leaves and cauline leaves, of upper plant appearing glabrous or with sparse hairs but lower leaves hispid, the hairs unbranched, stiff, with and without swollen bases. **Stems:** ± cylindric, 3–30+ mm diameter, light green, somewhat zigzagged, ± glabrous or with widely spaced hairs (ca. 1 mm long) aging glabrate, ± glaucous; forming a woody cylinder enclosing solid pith. **Leaves:** helically alternate, the largest at several nodes above shoot base and then decreasing upward, pinnately compound to pinnately lobed commonly with 5 leaflets or lobes (–11, lyrate; basal and lower cauline leaves) and unlobed (upper cauline leaves), to 500 mm long, petiolate, without stipules; petiole broadly and shallowly channeled, 30–130 mm long, ± fleshy, sparsely hairy, channel glaucous; blade typically obovate to broadly elliptic in outline, with large terminal segment and 0–several asymmetric leaflets or lobes on each side; rachis to 250 mm long, narrowly 2-winged from decurrent tissue of lateral lobes; when pinnately lobed terminal segment = 1/3–1/2 leaf length, broadly ovate, to 160 mm wide, tapered to cordate at base and often oblique, few-lobed or unlobed and wavy + shallowly and coarsely toothed to dentate on margins, obtuse to rounded at tip, pinnately veined with principal veins sunken on upper surface and conspicuously raised on lower surface, with scattered, stiff hairs mostly < 0.5 mm long, upper surface often scabrous from swollen bases of old hairs, lower surface with hairs mostly along veins; lateral lobes alternate or subopposite and unequal, ⊥ or often directed backward, irregularly oblong to elliptic, 10–140 mm long, the basal ones the smallest; blade of the uppermost leaves or on small plants mostly ovate in outline, with terminal lobe and 1–2 small lateral lobes, terminal lobe ovate with or without sublobes, toothed to entire on margins, acute at tip. **Inflorescence:** panicle of racemes, terminal, of numerous spreading to ascending, many-flowered racemes, not flat-topped with flower buds projecting above open flowers and fruits never overtopping buds or flowers, glabrous; axis of raceme stemlike, < 100–600+ mm in fruit, often purple on exposed surface and somewhat glaucous; bract subtending raceme leaflike, petiolate but smaller and narrower than upper cauline leaves, typically unlobed and lanceolate to linear-elliptic or narrowly oblanceolate, serrate to entire on margins; bractlet subtending pedicel of only the lowermost flowers in raceme, threadlike to narrowly elliptic, minute–60 mm long; pedicel 2.5–7 mm long and scarcely increasing but erect and appressed (ascending) in fruit. **Flower:** bisexual, radial, 10–16 mm across; **sepals** 4, monomorphic, erect to ascending soon spreading and abscising, lanceolate or oblong to oblanceolate or linear, 4–6 × 1–1.7 mm, greenish to yellow, 2 inner sepals slightly saclike at base and cupped at tip; **petals** 4, clawed, paddle-shaped, 6.5–13 × 3.5–6 mm; claw erect, 3–4.5 mm long, greenish to light or vivid yellow, winged 1–1.5 mm at base and narrow above; lobes spreading, broadly obovate, bright yellow, pinnately veined; **stamens** 6, free, outer 2 short and inner 4 longer; filaments (2.5–)3.5–5.2 mm long (short stamens) and 4.8–6.2 mm long (long stamens), light green to light yellow; anthers basifixed, dithecal, 1.5–2.2 mm long, light yellow, arrow-shaped at base, longitudinally dehiscent; pollen light yellow; **nectaries** 4 of opposite decussate pairs, 1 at inner base of each short filament, molarlike and slightly domed on top, ± 0.6 mm wide, 1 between bases for each pair of long stamens, fingerlike to conic or ovoid, 0.4–0.6 × ± 0.4 mm, green;

**pistil** 1,  $\leq$  long stamens at anthesis; ovary superior, straight and 4-sided, light yellowish green, 2-chambered, each chamber with 1 row of 5–10 ovules; style absent but with sterile beak ca. 1.5–2.5 mm long; stigma hemispheric-capitate,  $0.3 \times 0.4$  mm, greenish to yellow green, slightly cleft. **Fruit:** siliqua (silique), mostly appressed to rachis or on appressed pedicel, dehiscent by 2 valves, to 12-seeded, beaked,  $9\text{--}14 \times 1.1\text{--}1.7$  mm + beak 1.3–3 mm long, green often with purple drying brown, somewhat squarish to ellipsoidal in  $\times$ -section, valves acute at base and truncate at tip, with conspicuous midvein on each valve and sometimes netted venation between midvein and lateral veins, with 1 row of seeds per chamber; beak narrowly conic, lacking a seed. **Seed:** spheroid to broadly ellipsoid,  $1.5\text{--}1.8 \times 1\text{--}1.2$  mm, dull reddish brown or frosty gray, with netlike surface. Mid-December–early July.

Naturalized. Annual and the most common mustard in range, occurring in most disturbed locations and often in large populations, but density year-to-year appears to vary with amount of rainfall and coldness of winter, e.g., freezing after seedlings become established can dramatically reduce black mustard that spring (2009). *Brassica nigra* has large, coarse leaves, but this species is enjoyed by most people because it produces spring slopes covered with bright yellow flowers. Black mustard has short fruits appressed to the axis.  
B. A. Prigge & A. C. Gibson