

**99. DESCURAINIA** Webb & Berthelot, *Hist. Nat. Iles Canaries* 3(2, 1): 72. 1836, nom. cons.

播娘蒿属 bo niang hao shu

*Hugueninia* Reichenbach, nom. rej.; *Sophia* Adanson, nom. rej.

Herbs annual or perennial, rarely shrubs. Trichomes short-stalked, dendritic, very rarely simple, sometimes mixed with glandular, clavate papillae. Stems erect or prostrate, simple or branched basally and/or apically. Basal leaves petiolate, withered by flowering, 2- or 3-pinnatisect, rarely 1-pinnate. Cauline leaves similar to basal. Racemes ebracteate or rarely basally bracteate, elongated or not in fruit. Fruiting pedicels slender, divaricate or erect. Sepals oblong or linear, erect or ascending, base of lateral pair not saccate. Petals yellow or rarely creamy white, as long as or longer than sepals; blade obovate or oblanceolate, rarely oblong, apex obtuse; claw obsolete or distinct. Stamens 6, tetradynamous; filaments not dilated at base; anthers oblong, obtuse at apex. Nectar glands confluent, subtending bases of all stamens; median glands present. Ovules 5–100 per ovary. Fruit dehiscent siliques or silicles, linear, oblong, clavate, or rarely elliptic, terete, sessile; valves with a prominent midvein, smooth or torulose; replum rounded; septum complete or perforated, membranous, veinless or with 1–3 longitudinal veins; style absent or rarely distinct and to 1 mm; stigma capitate, entire. Seeds uniseriate or biseriate, wingless, oblong or ellipsoid, plump; seed coat minutely reticulate, usually mucilaginous when wetted; cotyledons incumbent.

About 40 species: mainly in North and South America (30 species) and Macaronesia (seven species), one species a cosmopolitan weed.

The record of *Descurainia sophioides* (Fischer) O. E. Schulz in *FRPS* and *Fl. Xizang*, (2): 410. 1985) is based on misidentified plants of *D. sophia*. The former species is restricted to Alaska, Canada, and Russia (Far East and Siberia). It is readily distinguished from *D. sophia* by having clavate glands on the distal parts of the plant and generally shorter fruiting pedicels 2–7(–10) mm. By contrast, *D. sophia* is completely eglandular and has fruiting pedicels (5–)8–15(–20) mm.

**1. *Descurainia sophia*** (Linnaeus) Webb ex Prantl in Engler & Prantl, *Nat. Pflanzenfam.* 3(2): 192. 1891.

播娘蒿 bo niang hao

*Sisymbrium sophia* Linnaeus, *Sp. Pl.* 2: 659. 1753.

Herbs annual, (10–)20–70(–100) cm tall, eglandular, sparsely to densely pubescent with dendritic trichomes, sometimes glabrous distally. Stems erect, simple basally, often branched above. Basal and lowermost cauline leaves 2- or 3-pinnatisect, ovate or oblong in outline, to 15 × 8 cm; petiole 0.1–2(–3) cm; leaf blade ultimate division linear or oblong, entire, acute to 10 × 2 mm. Upper cauline leaves sessile or shortly petiolate, smaller and often with narrower ultimate lobes, often glabrous. Fruiting pedicels (0.5–)0.8–1.5(–2) cm, slender, much narrower than fruit, straight, divaricate or ascending. Sepals yellowish, oblong-linear, 2–2.5 × ca. 0.5 mm. Petals yellow, narrowly oblanceolate, 2–2.5 × ca. 0.5 mm; claw 1.5–2 mm. Filaments 2–3 mm; anthers ca. 0.5 mm. Ovules 20–40 per ovary. Fruit narrowly linear, (1.2–)1.5–2.7(–3) cm × 0.5–0.8(–1) mm; valves glabrous, torulose, with a prominent midvein; septum with a broad central longitudinal band appearing as 2 or 3 veins; style obsolete or to 0.2 mm. Seeds reddish brown, oblong, 0.7–1 × 0.3–0.6 mm. Fl. and Fr. Apr–Jun.  $2n = 28^*$ .

Roadsides, waste places, disturbed sites, fields, pastures, deserts; near sea level to 4200 m. Throughout China except Guangdong, Guangxi, Hainan, Taiwan [Afghanistan, Bhutan, Japan, Kashmir, Kazakhstan, Korea, Kyrgyzstan, Mongolia, Nepal, Pakistan, Russia, Sikkim, Tajikistan, Turkmenistan, Uzbekistan; N Africa, SW Asia, Europe; introduced elsewhere].

The seeds are sometimes used as a substitute for mustard. Preparations from the plant are taken internally to eradicate worms, and externally to treat indolent ulcers.

