## 11. CORONOPUS Zinn, Cat. Pl. Hort. Gott. 325. 1757, nom. cons.

臭荠属 xiu qi shu

Senebiera de Candolle.

Herbs annual, biennial, or perennial with woody caudex. Trichomes absent or simple. Stems prostrate or ascending, rarely erect. Basal leaves sometimes rosulate, 1–3-pinnatisect, rarely serrate. Cauline leaves petiolate or subsessile, entire, serrate, or pinnatisect. Racemes many flowered, ebracteate. Fruiting pedicels erect or divaricate. Sepals ovate, oblong, or elliptic, ascending or spreading, base of lateral pair not saccate. Petals white or violet, longer or shorter than sepals, sometimes vestigial or absent; blade obovate, oblong, oblanceolate-linear, or subulate, obtuse; claw usually absent. Stamens 6 and tetradynamous, sometimes 2 and median; filaments usually dilated at base; anthers ovate, obtuse. Nectar glands 2, 4, or 6, median ones present. Ovules 2 per ovary. Fruit indehiscent silicle, didymous, schizocarpic, reniform, cordate, or obcordate, angustiseptate, sessile, breaking into 2, 1-seeded, closed halves (mericarps); valves woody, obscurely to prominently veined, glabrous or hairy, keeled or rounded, reticulate, rugose, verrucose, tuberculate, or rarely smooth; replum rounded; septum reduced to a rim or absent; style obsolete or to 1 mm; stigma capitate, entire. Seeds wingless, oblong, reniform, ovoid, or globose, plump or sometimes flattened; seed coat minutely reticulate, not mucilaginous when wetted; cotyledons incumbent.

Ten species: Africa, SW Europe, South America; two species (introduced) in China.

The limits of Coronopus are artificial and the genus is polyphyletic; it should perhaps be united with Lepidium.

1a. Cauline leaves entire, 1–5 mm wide; stems puberulent with minute trichomes to 0.15 mm ...... 1. C. integrifolius 1b. Cauline leaves pinnatisect or pinnatifid, broader; stems pilose with trichomes to 1 mm ...... 2. C. didymus

**1. Coronopus integrifolius** (de Candolle) Sprengel, Syst. Veg. 2: 853. 1825.

单叶臭荠 dan ye xiu qi

Senebiera integrifolia de Candolle, Mém. Soc. Hist. Nat. Paris 1: 144. 1799; Coronopus englerianus Muschler; C. linoides (de Candolle) Sprengel; C. wrightii H. Hara; Senebiera linoides de Candolle. Herbs annual or perennial, (7–)10–30(–45) cm tall, puberulent with cylindric or clavate, often curved trichomes to 0.15 mm. Stems prostrate, ascending, or erect, usually several from at base, branched above. Basal leaves not rosulate, soon deciduous; petiole 5–10 mm; blade lanceolate or spatulate, 2-4 cm, margin entire, dentate, or pinnatifid, apex acute. Middle cauline leaves narrowly lanceolate, oblanceolate, or linear (0.5-)1-5 (-7.5) cm  $\times$  1–5 mm, base attenuate and petiolelike, margin entire or rarely serrate or incised, apex acute or acuminate. Racemes terminal or lateral, leaf-opposed. Fruiting pedicels slender, erect or ascending, straight, 1–3(–4.5) mm, glabrous or pubescent. Sepals greenish white or purplish, elliptic, 0.7–1 mm, ascending or spreading. Petals white, linear, 0.6-1 mm. Stamens 2, median; filaments white, dilated at base, 0.4-0.7 mm; anthers ovoid, ca. 0.1 mm. Fruit 0.9- $1.5(-2) \times 1.7 - 2.5(-3.5)$  mm, didymous, not compressed, emarginate at apex and base; valves subglobose, prominently reticulate or rugose, rarely smooth, rounded on back; style obsolete to 0.1 mm, included in apical notch. Seeds oblong, finely reticulate,  $0.8-1.2 \times$ 0.6-0.8 mm.

Roadsides, waste places. Guangdong, Taiwan [native to Africa]. **2. Coronopus didymus** (Linnaeus) Smith, Fl. Brit. 2: 691. 1804.

臭荠 xiu qi

*Lepidium didymum* Linnaeus, Syst. Nat., ed. 12, 2: 433. 1767; *Senebiera didyma* (Linnaeus) Persoon; *S. pinnatifida* de Candolle.

Herbs annual or rarely biennial, fetid, 10-45(-70) cm tall, glabrous or pilose with straight trichomes to 1 mm. Stems procumbent or erect, usually several from base, branched above. Basal leaves not rosulate, pinnatisect or bipinnatisect, 4–10 cm; lateral lobes 2–7(–10) on each side of rachis, variable in size, entire, dentate, or incised, acute. Middle cauline leaves similar to basal ones,  $1.5-3.5(-4.5) \times 0.5-1.2$  cm, progressively smaller and less divided upward, shortly petiolate to subsessile; lobes lanceolate to oblong or elliptic, entire to serrate or incised. Racemes terminal or lateral and leaf opposed. Fruiting pedicels slender, ascending to divaricate or slightly reflexed, straight or recurved, 1.5–2.5(–4) mm, glabrous or pubescent. Sepals ovate, 0.5–0.7(–0.9) mm, ascending to spreading, glabrous or pubescent. Petals white, elliptic to linear, 0.4-0.5 mm. Stamens 2 or rarely 4. median: filaments white, dilated at base, 0.3– 0.6 mm; anthers ovoid, 0.1–0.2 mm. Fruit  $1.3-1.7 \times 2-$ 2.5 mm, didymous, compressed, emarginate at apex and base; valves subreniform, semicircular, or suboblong, prominently reticulate or rugose, rounded on back; style absent, sometimes obsolete, included in apical notch. Seeds oblong, curved, finely reticulate,  $1-1.2 \times 0.7-0.8$ mm. Fl. Mar–Jun. 2n = 32.

Roadsides, waste areas, fields; near sea level to 1000 m. Anhui, Fujian, Guangdong, Hubei, Jiangsu, Jiangxi, Shandong, Sichuan, Taiwan, Xinjiang, Yunnan, Zhejiang [native to South America; naturalized elsewhere].

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