

151. ONOBRYCHIS Miller, Gard. Dict. Abr., ed. 4. 1754.

驴食豆属 lü shi dou shu

Xu Langran (徐朗然 Xu Lang-rang); Byoung-Hee Choi

Herbs [or shrublets]. Stipules dry membranous, connate or rarely distinct. Leaves imparipinnate; leaflet blades opposite, margin entire. Racemes axillary, with a long peduncle, with bracts and bracteoles. Calyx campanulate. Corolla purple, pinkish purple, or pale yellow. Stamens diadelphous (9+1); anthers uniform. Ovary sessile, with 1 or 2 ovules; style filiform; stigma capitate. Legume usually with 1 loment, subglobose, inflated, indehiscent, with elevated veins, usually prickly.

About 130 species: N Africa, C and SW Asia, Europe; three species (one introduced) in China.

Species of this genus are good fodder plants.

- 1a. Annuals; loments with a broad membranous margin 1. *O. pulchella*
- 1b. Perennials; loments with a non-membranous margin.
 - 2a. Native species; racemes without caespitose trichomes before anthesis 2. *O. tanaitica*
 - 2b. Cultivated species; racemes with caespitose trichomes before anthesis 3. *O. viciifolia*

1. *Onobrychis pulchella* Schrenk in Fischer & C. A. Meyer, Enum. Pl. Nov. 1: 87. 1841.

美丽红豆草 mei li hong dou cao

Herbs, annual, 40–80 cm tall. Stems simple, erect. Stipules broadly triangular, 8–11 mm, hyaline, basally connate. Leaves 6–11 cm, 9–13-foliolate; leaflet blades narrowly lanceolate to linear-oblong, 1.5–3 cm × 2–3 mm, abaxially densely pilose, adaxially glabrous. Racemes lax, with many flowers; bracts ± as long as pedicel; peduncle inconspicuously longer than leaves. Pedicel ca. 3 mm. Calyx campanulate, 4–4.5 mm, glabrous; teeth subulate, 2–3 × as long as tube, margin pilose. Corolla pinkish purple; standard obovate, 5–6 mm; wings ca. 1/4 as long as standard; keel slightly longer than standard. Ovary glabrous. Legume with 1 loment; loment subglobose, 8–10 mm in diam., subglabrous, margin membranous and entire but repand. Fl. May–Jun, fr. Jun–Jul.

Steppes in low mountains; 600–900 m. Xinjiang (Huocheng) [Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan; N Africa].

2. *Onobrychis tanaitica* Sprengel, Neue Entdeck. Pflanzenk. 2: 162. 1821.

顿河红豆草 dun he hong dou cao

Herbs, perennial, 40–60 cm tall. Stems numerous, erect. Stipules triangular-ovate, 6–8 mm, connate farther than middle. Leaves 1–1.5(–2.2) cm, 9–13-foliolate; leaflet blades narrowly elliptic to oblong-linear, 1.2–2.5 × 0.3–0.6 cm, abaxially appressed pubescent, adaxially glabrous. Racemes densely spicate, with many flowers; bracts lanceolate, ca. 2 × as long as pedicel; peduncle conspicuously longer than leaves. Pedicel ca. 1 mm. Calyx campanulate, 6–7 mm, villous; teeth subulate-lanceolate, 2–2.5 × as long as tube. Corolla pinkish purple; standard obovate, 8–10 mm; wings ca. 1/4 as long as standard; keel ± as long as standard. Ovary pubescent. Legume with 1 loment; loment subglobose, 5–6 mm in diam., inflated, pubescent, papillose-prickly, margin narrowly thickening. Fl. Jun–Jul, fr. Jul–Aug.

Meadows, scrub on steppes; 1400–1800 m. N Xinjiang [Kazakh-

stan, Kyrgyzstan, Russia (W Siberia), Turkmenistan, Uzbekistan; SW Asia, SE Europe].

3. *Onobrychis viciifolia* Scopoli, Fl. Carniol., ed. 2, 2: 76. 1772.

驴食草 lü shi cao

Onobrychis sativa Lamarck.

Herbs, perennial, 0.5–1.2 m tall. Stems erect, caespitose. Stipules triangular-ovate, 7–9 mm, connate farther than middle. Leaves 10–18 cm, 13–19-foliolate; leaflet blades oblong-lanceolate to lanceolate, 2–3 × 0.4–1 cm, abaxially appressed pubescent, adaxially glabrous. Racemes densely spicate, with many flowers; bracts lanceolate, ca. 2 × as long as pedicel; peduncle conspicuously longer than leaves. Pedicel ca. 1 mm. Calyx campanulate, 6–8 mm, villous; teeth subulate-lanceolate, 2–2.5 × as long as tube. Corolla pinkish purple; standard obovate, 8–10 mm; wings ca. 1/4 as long as standard; keel ± as long as standard. Ovary densely appressed pubescent. Legume with 1 loment; loment subglobose, 5–6 mm in diam., inflated, margin thickened and adaxially with prickles. Fl. Jun–Jul, fr. Jul–Aug.

Cultivated. Gansu, Hebei, Nei Mongol, Qinghai, Shaanxi, Shanxi [probably native to C Europe].

This species is a good fodder plant and is also important for water and soil conservation in loess plateau areas.

