Herbs annual, biennial, or perennial with stolons or woody caudex. Trichomes simple, mixed with stalked, 1–3-forked ones. Stems erect or decumbent, often several from base, usually glabrous above. Basal leaves rosulate, entire, toothed, or pinnately lobed. Cauline leaves petioleate or subsessile, entire, dentate, or rarely lyrate. Racemes few to several flowered, ebracteate. Fruiting pedicels ascending or divaricate or slightly reflexed. Sepals oblong, erect or ascending, glabrous or pubescent, base of lateral pair subsessile or not. Petals white, pink, or purple; blade ovate, spatulate, or oblanceolate, apex obtuse or emarginate; claw distinct or not. Stamens 6, erect, slightly tetradynamous; filaments not dilated basally; anthers oblong, obtuse. Nectar glands confluent, subtending bases of filaments. Ovules spatulate, or oblanceolate, apex obtuse or emarginate; claw distinct or not. Stamens 6, erect, slightly tetradynamous; ascending, glabrous or pubescent, base of lateral pair subsaccate or not. Petals white, pink, or purple; blade obovate, several flowered, ebracteate. Fruiting pedicels ascending or divaricate or slightly reflexed. Sepals oblong, erect or toothed, or pinnately lobed. Cauline leaves petiolate or subsessile, entire, dentate, or rarely lyrate. Racemes few to forked ones. Stems erect or decumbent, often several from base, usually glabrous above.

**1. Arabidopsis thaliana** (Linnaeus) Heynhold in Holl & Heynhold, Fl. Sachsen 1: 538. 1842.

**鼠耳芥** shu er jie


Herbs annual, (2–)5–30–(50) cm tall. Stems erect, 1 or few from base, simple or branched above, basally with predominantly simple trichomes, apically glabrous. Basal leaves shortly petioleate; leaf blade ovate, spatulate, ovate, or elliptic, 0.8–3.5(–4.5) cm × (1–)2–10(–15) mm, adaxially with predominantly simple and stalked 1-forked trichomes, margin entire, repand, or dentate, apex obtuse. Cauline leaves subsessile, usually few; blade lanceolate, linear, oblong, or elliptic, (0.4–)0.6–1.8(–2.5) cm × 1–6(–10) mm, entire or rarely few toothed. Fruiting pedicels slender, divaricate, straight, 3–10(–15) mm. Sepals 1–2(–2.5) mm, glabrous or distally sparsely pubescent with simple trichomes, lateral pair not saccate. Petals white, spatulate, 2–3.5 × 0.5–1.5 mm, base attenuate to a short claw. Filaments white, 1.5–2 mm. Ovules 40–70 per ovary. Silicles linear, terete, smooth, (0.8–)1–1.5(–1.8) cm × 0.5–0.8 mm; valves with a distinct midvein; style to 0.5 mm. Seeds ellipsoid, plump, light brown, 0.3–0.5 mm; cotyledons incumbent. Fl. and fr. Jan–Jun(–Oct). 2n = 10*.

Plains, mountain slopes, river banks, roadsides; near sea level to 2000 m. Anhui, Gansu, Guizhou, Henan, Hebei, Hunan, Jiangsu, Jiangxi, Shaanxi, Shandong, Sichuan, Xinjiang, Xizang, Yunnan, Zhejiang [India, Japan, Kazakhstan, Korea, Mongolia, Russia, Tajikistan, Uzbekistan, Africa, SW Asia, Europe, North America].

*Arabidopsis thaliana* is the most widely used flowering plant as a model organism for studies in genetics, development, physiology, biochemistry, and related fields. It is also a naturalized weed throughout much of the world.


**叶芽鼠耳芥** ye ya shu er jie

*Cardamine gemmifera* Matsumura, Bot. Mag. (Tokyo) 8: 49. 1899; *Arabis coronata* Nakai; *A. gemmifera* (Matsumura) Makino; *A. gemmifera* var. *alpicola* H. Hara; *A. greatrexii* (Miyabe & Kudo) Miyabe & Tatemaki; *A. halleri* Linnaeus var. *senanensis* Franchet & Savatier; *A. maximowiczii* N. Busch; *A. senanensis* (Franchet & Savatier) Makino; *Cardamine greatrexii* Miyabe & Kudo; *Cardaminopsis gemmifera* (Matsumura) Berkutenko.

Herbs perennial, stoloniferous, (10–)20–45(–60) cm tall. Stems decumbent, few from base, simple or branched above, basally with simple and 1-forked trichomes, apically glabrous. Basal leaves with a petiole (5–)1–2.5(–5) cm; leaf blade orbicular, broadly ovate, or spatulate, (1–)2–4.5(–9) × (0.5–)1–1.5(–2.5) cm, adaxially with a mixture of simple and stalked, 1- or 2-forked trichomes, margin lyrate-pinnatifid and with (1
or) 2–4(–6) lateral lobes on each side; terminal lobe suborbicular, much larger than lateral ones, sometimes coarsely dentate, rarely entire or repand, apex obtuse. Cauline leaves shortly petiolate, several; blade of middle ones ovate, oblanceolate, oblong, or elliptic, (0.5–)1–2.5(–8) × (0.2–)0.5–1.5(–3) cm, coarsely toothed or rarely lobed, gradually reduced in size upward. Fruiting pedicels slender, divaricate or slightly reflexed, straight, (0.5–)0.8–1.3(–2) cm. Sepals 1.5–2 mm, glabrous or apically with few simple trichomes, lateral pair saccate. Petals white or pale purple, obovate, 4–5(–6.5) × 2–2.5(–3.5) mm; claw 1–2 mm. Filaments white, 2–2.5 mm. Siliques linear, flattened, torulose, (0.9–)1–1.5(–1.8) cm × 0.5–0.8 mm; valves without a distinct midvein; style to 0.7 mm. Seeds oblong, flattened, light brown, 0.5–0.7 mm; cotyledons accumbent. Fl. Jun–Jul, fr. Jul–Aug.

Gravely or grassy slopes, forests; 1500–2600 m. Heilongjiang, Jilin, Liaoning, Taiwan [Japan, Korea, Russia (Far East, E Siberia)].

The record of Arabidopsis halleri subsp. halleri in FRPS (as Arabis halleri) is based on misidentified plants of subsp. gemmifera; true subsp. halleri is distributed in E and S Europe.

3. Arabidopsis lyrata (Linnaeus) O’Kane & Al-Shehbaz subsp. kamchatica (Fischer ex de Candolle) O’Kane & Al-Shehbaz, Novon 7: 326. 1997. 琴叶鼠耳芥 qin ye shu er jie

Arabis lyrata Linnaeus var. kamchatica Fischer ex de Candolle, Syst. Nat. 2: 231. 1821; A. kamchatica (Fischer ex de Candolle) Ledebour; A. kawasakiiana Makino; A. lyrata subsp. kamchatica (Fischer ex de Candolle) Hultén; A. morrisonensis Hayata; Cardaminopsis kamchatica (Fischer ex de Candolle) O. E. Schulz.

Herbs biennial or perennial with a caudex, (5–)10–30(–45) cm tall. Stems erect or decumbent, 1 to many from base, usually branched above, basally with simple and 1-forked trichomes, apically glabrous. Basal leaves with a petiole 0.5–2(–6) cm; leaf blade oblanceolate or ovate, (0.5–)1–3(–8) × (0.3–)0.5–1.5 cm, adaxially with a mixture of simple and stalked, 1-forked trichomes, rarely glabrous, margin dentate or lyrata, with 1–3 lateral lobes on each side, apex obtuse. Cauline leaves shortly petiolate, several; blade of middle ones oblanceolate, (0.5–)1–3(–4) cm × (1–)2–7 mm, entire, repand, or obscurely toothed, rarely lobed, gradually reduced in size upward. Fruiting pedicels slender, divaricate, straight, (0.5–)0.8–1.2 cm. Sepals 2–3 mm, glabrous or densely pubescent, lateral pair succate. Petals white, spatulate or obovate, 4–5(–6) × 1.5–2(–2.5) mm; claw to 1 mm. Filaments white, 2–3 mm. Siliques linear, flattened, torulose, (1.5–)2–3.5(–4.5) cm × 0.5–0.8 mm; valves with a distinct midvein extending full length; style to 0.5 mm. Seeds oblong, flattened, light brown, 0.9–1.2 mm; cotyledons accumbent. Fl. Mar–Jul, fr. Jun–Oct. 2n = 16, 32.

Gravely slopes, forests, alpine regions, roadsides; 1700–3400 m. Jilin, Taiwan [Japan, Korea, Russia (Far East, E Siberia); NW North America].

Arabidopsis lyrata subsp. lyrata is restricted to North America.