

PAEONIACEAE §

1. *Paeonia* L.

A. Flowers pale pink, sometimes white; petals usually 5; carpels 3–5, with strongly recurved stigmata; terminal leaflet obovate, apex acute to obtuse, lower surface densely hirsute with long (ca. 1 mm long) appressed hairs or sometimes glabrous
..... 1. *P. obovata*

A. Flowers white; petals usually 6; carpels 2 or 3, with gently recurved stigmata; terminal leaflet narrowly obovate, apex acuminate, lower surface usually glabrous, if pubescent, sparingly hirsute with long hairs and/or shorter (less than 0.5 mm long) hairs
..... 2. *P. japonica*

1. *Paeonia obovata* Maxim. in Mém. Acad. Imp. Sci. Saint-Pétersbourg, ser. 6, Sci. Math., Seconde Pt. Sci. Nat. 9: 29 (1859).

Paeonia oreogeton S. Moore in J. Linn. Soc., Bot. 17: 376 (1879).

Paeonia vernalis Mandl in Bot. Közlem. 19: 90 (1921).

Paeonia obovata Maxim. var. *amurensis* Schipcz. in Bot. Mater. Gerb. Glavn. Bot. Sada RSFSR 2: 44 (1921).

Paeonia obovata Maxim. var. *glabra* Makino in J. Jap. Bot. 5: 33 (1928).

Paeonia japonica (Makino) Miyabe et Takeda var. *pilosa* Nakai in J. Jap. Bot. 13: 395 (1937), pl. Kor.

Paeonia obovata Maxim. f. *oreogeton* (S. Moore) Kitag., Lin. Fl. Manshur.: 221 (1939).

Paeonia japonica (Makino) Miyabe et Takeda f. *glabra* (Makino) Kitam. in Acta Phytotax. Geobot. 20: 203 (1962).

[*Paeonia obovata* Maxim. f. *glabra* (Makino) Kitam. in Kitam. & Murata, Col. Ill. Herb. Pl. Jap. 2: 217 (1961), nom. nud.]

Japanese name: Benibana-yama-shakuyaku.

Perennial herbs, 30–60 cm tall. Rootstock horizontal, stout, to 1 cm in diam. Stem glabrous, enclosed by oblong, vaginate, membranaceous scales at base. Middle cauline leaves 2 or 3, upper surface dark green, lower surface glaucous, 12–38 cm long (incl. petiole), densely hirsute with appressed hairs ca. 1 mm long along veins or sometimes glabrous, biternate; terminal leaflet obovate to widely obovate, 7–15 cm long, 4–7 cm wide, apex acute to obtuse, base cuneate, entire, petiolules 1–2 cm long; petiole 8–10 cm long. Upper cauline leaves ternate or simple, petiole 2–4 cm long. Flowers May to June, 7–10 cm in diam., solitary, erect, only half opening. Sepals 3(–5), widely ovate to widely oblong, 1.2–2 cm long, pale green, reflexed in fruit. Petals (4 or) 5(–7), pink or dark pink or sometimes white, obovate to elliptic, 3–5 cm long, 0.8–2 cm wide. Stamens 1.2–1.5 cm long; anthers narrowly oblong, 5–6 mm long; filaments white or pale pink, 6–8 mm long. Carpels (3 or) 4 or 5, glabrous, with disc enclosing base of carpels; stigmata strongly recurved, tinged reddish purple. Follicles oblong-ovoid, 2.5–3.5 cm long, divergent; seeds globose, black, 6–7 mm in

diam.

Chromosome number: $2n = 10$ (Starodubtzev 1985; Nishikawa 1985), 20 (Sokolovskaya 1966).

Japan: S. Kuriles, Hokkaidō, Honshū, Shikoku and Kyūshū. Temperate summer-green forests; 500–1400 m.

Distr.: Russian Far East, Sakhalin, the Kuriles, Japan, Korea and China.

Icones: Satake et al., Herb. Pl. 2: photo. 108 2; Makino, rev. ed.: f. 717; Azegami, Wild Fl. Jap. Mountainside: p. 344 3, bottom (1996).

2. *Paeonia japonica* (Makino) Miyabe et Takeda in Gard. Chron., ser. 3, 48: 366, f. 153 (1910).

Paeonia obovata Maxim. var. *japonica* Makino in Bot. Mag. Tokyo 15: 59 (1901).

Paeonia japonica (Makino) Miyabe et Takeda f. *hirsuta* H. Hara in J. Jap. Bot. 9: 311 (1933).

Paeonia japonica (Makino) Miyabe et Takeda var. *pilosa* Nakai in J. Jap. Bot. 13: 395 (1937), pro parte, excl. pl. Kor.

Japanese name: Yama-shakuyaku.

Perennial herbs, 30–50 cm tall. Rootstock horizontal, stout, to 1 cm in diam. Stem glabrous, enclosed by oblong, vaginate, membranaceous scales at base. Middle cauline leaves 2 or 3, upper surface dark green, lower surface glaucous, 15–34 cm long (incl. petiole), glabrous or sometimes sparingly hirsute with long appressed hairs and/or with hairs less than 0.5 mm long, veins on lower surface with appressed hairs, biternate; terminal leaflet narrowly obovate to elliptic, 6–14 cm long, 2–9 cm wide, apex acuminate or sometimes acute, base usually narrowly cuneate, entire, petiolules 0.3–3 cm long; petiole 5–16 cm long. Upper cauline leaves ternate or simple, petiole 1.5–3 cm long. Flowers May to June, 6–10 cm in diam., solitary, erect, only half opening. Sepals 3(–5), widely ovate to widely oblong, 1–2 cm long, pale green, reflexed in fruit. Petals 6(–9), white, obovate, 3.5–5.5 cm long, 2–4 cm wide. Stamens 1–1.5 cm long; anthers narrowly oblong, 5–8 mm long; filaments white, 6–8 mm long. Carpels 2 or 3, glabrous; stigmata gently to strongly recurved, tinged reddish purple. Follicles oblong-ovoid, 2.5–4 cm long, divergent and bending backward; seeds globular, black, 6–7 mm in diam.

Japan: Hokkaidō, Honshū, Shikoku and Kyūshū.

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Paeonia

Temperate summer-green forests; 200–1700 m. Endemic.

Icones: Kitamura & Murata, Herb. Pl. **2**: t. 49 427; Terasaki, rev. ed.: f. 935; Satake et al., Herb. Pl. **2**: photo. 108 3 & 4; Makino, rev. ed.: f. 716; Azegami, Wild Fl. Jap. Mountainside: p. 344 1 & 2, top (1996).

Note: Korean plants with white flowers and glabrous

leaves are frequently regarded to be *P. japonica* (e.g., Y. N. Lee, Flora of Korea: photo. 612, 1996). However, they are *P. obovata* because of their obovate terminal leaflet with acute apex and strongly recurved stigmata. *Paeonia japonica* is an endemic species of Japan.