

**1. NUPHAR** Smith in Sibthorp & Smith, Fl. Graec. Prodr. 1: 361. 1809, nom. cons.

萍蓬草属 ping peng cao shu

Fu Dezhi (傅德志); Donald Padgett<sup>3</sup>

*Nymphozanthus* Richard, nom. rej.

Herbs perennial. Rhizomes repent, branched. Leaves dimorphic, either floating with thick leathery blades and long petioles or submersed with thin, papery blades and short petioles; leaf blade ovate to elliptic, venation primarily pinnate, base cordate, margin entire, not peltate. Flowers hypogynous, emergent, perianth ± upright. Sepals (4–)5(–7), yellow or orange, petaloid, oblong to obovate, persistent. Petals numerous, yellow, small, stamenlike. Stamens nearly as long as sepals, inserted at base of ovary; filament strap-like; anthers yellow, connective unappendaged. Carpels completely united. Style absent. Stigma sessile and radiate on flattened stigmatic disc, lacking marginal appendages. Fruit ovoid to urceolate, irregularly dehiscent. Seeds smooth, not arillate.

About ten species: widespread in N temperate regions; two species in China.

1a. Floating leaf blades 6–17 cm; stigmatic disc deeply lobed, 4–7.5 mm in diam. .... 1. *N. pumila*

1b. Floating leaf blades 15–30 cm; stigmatic disc entire, 7–19 mm in diam. .... 2. *N. lutea*

**1. Nuphar pumila** (Timm) de Candolle, Syst. Nat. 2: 61. 1821.

萍蓬草 ping peng cao

*Nymphaea lutea* Linnaeus var. *pumila* Timm, Mag. Naturk. Oekon. Mecklenburgs 2: 250. 1795; *Nuphar shimadae* Hayata; *Nymphaea lutea* subsp. *pumila* (Timm) Bonnier & Layens; *Nymphaea pumila* (Timm) Hoffmann.

Rhizomes stout, 1–3 cm in diam. Petiole 20–50 cm, pubescent; floating leaf blade broadly ovate to ovate, seldom elliptic, 6–17 × 6–12 cm, abaxially glabrous to densely pubescent, adaxially glabrous, base cordate and basal lobes remote from each other. Flower 1–4.5(–6) cm in diam. Peduncle 40–50 cm, pubescent. Sepals yellow, oblong to elliptic, 1–2.5 cm. Petals narrowly cuneate to broadly linear, 5–7 mm, apex emarginate. Anthers yellow, 1–6 mm. Stigmatic disc deeply lobed, 4–7.5 mm in diam., rays 8–13(–14). Fruit 1–2 cm in diam. Seeds brown, oblong to ovoid, 3–5 mm. Fl. May–Sep. 2n = 34.

Lakes, ponds. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hebei, Heilongjiang, Henan, Hubei, Jiangsu, Jiangxi, Jilin, Nei Mongol, Taiwan, Xinjiang, Zhejiang [Japan, Korea, Mongolia, Russia; N Europe].

The description of *Nuphar shimadae* clearly indicates that this taxon is conspecific with *N. pumila*; however, it remains unclear as to which subspecies the plants in Taiwan should be referred, since no specimens were examined from that region.

1a. Anthers 1–2.5 mm; flowers 1–2.5 cm in diam. .... 1a. subsp. *pumila*

1b. Anthers 3.5–6 mm; flowers 2–4.5(–6) cm in diam. .... 1b. subsp. *sinensis*

**1a. Nuphar pumila** subsp. *pumila*

萍蓬草(原亚种) ping peng cao (yuan ya zhong)

*Nuphar bornetii* H. Léveillé & Vaniot; *N. minima* (Willdenow) Smith; *Nymphaea lutea* var. *minima* Willdenow.

Rhizomes 2–3 cm in diam. Petiole 20–50 cm; floating leaf blade broadly ovate to ovate, seldom elliptic, 6–17

× 6–12 cm, abaxially glabrous to densely pubescent. Flower 1–2.5 cm in diam. Pedicel 40–50 cm, pubescent. Sepals yellow, oblong to elliptic, 1–2 cm. Petals 5–7 mm. Anthers 1–2.5 mm. Stigmatic disc 4–7.5 mm in diam., rays 8–13. Fruit 1–2 cm in diam. Seeds oblong, ca. 5 mm. Fl. and fr. May–Sep. 2n = 34.

Lakes, ponds. Anhui, Guizhou, Hebei, Heilongjiang, Henan, Hubei, Jiangsu, Jiangxi, Jilin, Nei Mongol, Xinjiang, Zhejiang [N Japan, Korea, Mongolia, Russia; N Europe].

**1b. Nuphar pumila** subsp. *sinensis* (Handel-Mazzetti) D. Padgett, Sida 18: 825. 1999.

中华萍蓬草 zhong hua ping peng cao

*Nuphar sinensis* Handel-Mazzetti, Kaiserl. Akad. Wiss. Wien, Math.-Naturwiss. Kl., Anz. 63: 8. 1926.

Rhizomes 1–3 cm in diam. Petiole ca. 40 cm; floating leaf blade ovate, 9–15 × 7–12 cm, abaxially margin densely pubescent. Flower 2–4.5(–6) cm in diam. Sepals yellow, oblong to obovate, to 2.5 cm. Petals ca. 7 mm. Anthers 3.5–6 mm. Stigmatic disc 5–6 mm in diam., rays 8–13. Fruit 1.5–2 cm in diam. Seeds ovoid, ca. 3 mm. Fl. and fr. May–Sep.

• Ponds. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hunan, Jiangxi, Zhejiang.

**2. Nuphar lutea** (Linnaeus) Smith in Sibthorp & Smith, Fl. Graec. Prodr. 1: 361. 1809.

欧亚萍蓬草 ou ya ping peng cao

*Nymphaea lutea* Linnaeus, Sp. Pl. 1: 510. 1753.

Rhizomes stout, 3–8 cm in diam. Petiole ca. 50 cm, glabrous; floating leaf blade elliptic, 15–30 × 10–22 cm, leathery, abaxially glabrous or pubescent, adaxially glabrous, base cordate and basal lobes spreading. Flower 4–5 cm in diam. Peduncle to ca. 50 cm, glabrous. Sepals yellow, broadly ovate to orbicular, 2–3 cm. Petals linear, 1–1.5 cm, apex truncate to rounded. Anthers yellow, 4–7 mm. Stigmatic disc entire, 7–19 mm in diam., rays 5–25. Fruit ca. 2.5 cm in diam. Seeds olive green, ovoid, ca. 5 mm. Fl. Jul–Aug. 2n = 34.

Lakes and ponds. Xinjiang [Kazakhstan, Russia (Siberia); Africa, SW Asia, Europe].

