

### 3. **MONESES** Salisbury ex S. F. Gray, Nat. Arr. Brit. Pl. 2: 403. 1821.

独丽花属 du li hua shu

Qin Haining (覃海宁); Peter F. Stevens

*Bryophthalmum* E. Meyer; *Odostima* Rafinesque.

Herbs perennial, small, glabrous, stoloniferous. Leaves radical, petiolate, leathery, serrulate. Flower solitary, terminal on long stalk. Sepals 5, deeply lobed, persistent. Petals spreading, white or pink, orbicular. Stamens (8–)10; filaments subulate, base glabrous; anthers with tubes, opening by 2 apical pores; disk obscure. Ovary globose or subglobose; ovules on thickened placentas on inner angles of loculi; style straight, apex clavate; stigma 5-toothed. Seeds small, testa elongated at both ends.  $n = 13$ .

One or two species: Asia, Europe, North America; one species in China.

#### 1. **Moneses uniflora** (Linnaeus) A. Gray, Man. Bot. 273. 1848.

独丽花 du li hua

*Pyrola uniflora* Linnaeus, Sp. Pl. 1: 397. 1753; *Bryophthalmum uniflorum* (Linnaeus) E. Meyer; *Chimaphila rhombifolia* Hayata; *Moneses grandiflora* Salisbury; *M. rhombifolia* (Hayata) Andres.

Herbs evergreen. Rhizome creeping, slender, 0.2–0.6 mm in diam.; roots long, slender, branched. Aerial stems erect or ascending, terete to angular, 1–5 cm, 0.6–1 mm in diam., not branched, glabrous. Leaves in 3 or 4 subverticils of 2 or 3 each, alternating with ca. 5 scales; petiole (0.5–)1–1.5 cm; leaf blade abaxially pale green, adaxially deep green and slightly shiny, broadly rhombic, 1–1.6 × 1–1.5 cm, abaxially glabrous, base subrounded to broadly cuneate, margin minutely toothed, apex rounded to obtuse. Flower nodding,

regular, opening fully. Scape erect, (4–)5–10 cm tall, 1-flowered, glabrous. Bracts 1 or 2 on upper part of scape, 4–5 × ca. 2 mm, ciliolate. Sepals (4 or)5, ovate-elliptic, ca. 2.5 mm, ciliolate, apex rounded. Petals (4 or)5, white, orbicular to broadly ovate, sessile. Stamens (8–)10; anthers 3–4 mm, tubes distinct and strongly curved. Ovary subglobose; style 4–5 mm; stigma peltate with 5 distinct marginal papillae. Capsules subglobose, 5–6 mm in diam., fibers absent at margin. Seeds narrowly fusiform; testa generally with 7 or 8 cells along longest axis, inner testa walls with scalariform pits. Fl. Jul, fr. Sep.  $2n = 26$ .

Moist mossy coniferous forests, more rarely in wet *Betula* or *Pinus* woods; middle elevations. Gansu, Heilongjiang, Jilin, Shanxi, N Sichuan, Taiwan, Xinjiang, NW Yunnan [Japan, N Korea, Mongolia, Russia; widely distributed in N temperate and subarctic zones, particularly Europe].

