

2. MITRASACME Labillardière, Nov. Holl. Pl. 1: 35. 1804.

尖帽花属 jian mao hua shu

Herbs annual or perennial. Leaves opposite along stem and/or in a whorl at base, sessile; stipules absent. Flowers axillary and/or terminal, solitary or in pedunculate umbel-like cymes which sometimes form irregular compound umbels, 4-merous, white or yellow, rarely pale blue. Calyx campanulate, 2–4-lobed; lobes valvate. Corolla campanulate [salverform or urceolate], often bearded at mouth, tube short to long; lobes exduplicate-valvate in bud. Stamens inserted on lower half of corolla tube; filaments much longer than anthers; anthers introrse, extrorse, or rarely latrorse, included to slightly exerted, 2-locular. Pistil glabrous. Ovary superior to slightly inferior; ovules many per locule. Style one, base usually parted, rarely 2 separate styles; stigma capitate or 2-cleft. Capsule globose to subglobose, opening by apical loculicidal slits, many seeded; horns 2, terminated by a style. Style split or remain partly connate. Seeds minute, cylindric-ellipsoid to angular; seed coat thin reticulate to verrucose or almost very minutely papillate; endosperm fleshy.

About 40 species: mainly Australia, extending to E, S, and SE Asia and Pacific Islands; two species in China.

- 1a. Stems glabrous or very sparsely hairy, 4-ribbed to narrowly 4-winged; flowers always axillary, solitary, rarely 2 together in a sessile cluster; seed coat honey-comblike ..... 1. *M. indica*
- 1b. Stems hairy at least near base, terete; flowers mostly terminal, usually in long pedunculate umbel-like cymes; seed coat finely reticulate to papillate ..... 2. *M. pygmaea*

1. **Mitrasacme indica** Wight, Icon. Pl. Ind. Orient. 4: 15. 1850.

尖帽花 jian mao hua

*Mitrasacme alsinoides* R. Brown var. *indica* (Wight) H. Hara.

Annuals, erect, to 15 cm tall. Stems usually branched, slender, distinctly 4-ribbed to narrowly 4-winged, glabrous or subglabrous; internodes 2–4 × as long as leaves. Leaf blade ovate to very narrowly ovate, 3–7 × 1.5–2.5 mm, herbaceous, glabrous or glabrescent, apex acute; midrib abaxially prominent, lateral veins inconspicuous on both surfaces. Flowers solitary in upper leaf axils. Pedicel filamentous, 3–8 mm, glabrous or scabrous. Calyx to 2 mm, glabrous, basally connate to ± half its length, lobes narrowly oblong. Corolla white, campanulate, 3–4 mm, shortly and sparsely bearded at mouth; lobes subrounded, ca. 1.5 mm. Stamens included; filaments ca. 1 mm; anthers introrse, ovate to rarely sagittate, ca. 0.7 mm, with an apical appendix. Pistil ca. 1.5 mm. Ovary ovoid, ca. 0.5 mm in diam. Style ca. 1 mm, base strongly parted, connate along apical half; stigma broadly truncate to 2-cleft. Fruiting pedicel 0.6–2.5 cm. Capsule subglobose, to 2 mm in diam.; style connate only at apex. Seeds angular, ovoid, coarsely reticulate. Fl. Feb–Jun.

Grassy open places; near sea level to 500 m. Fujian, Guangdong, Hainan, Jiangsu, Shandong, Taiwan [India, Indonesia, Japan, Korea, Malaysia, Myanmar, Philippines, Sri Lanka, Thailand, Vietnam, Australia].

2. **Mitrasacme pygmaea** R. Brown, Prodr. 453. 1810.

水田白 shui tian bai

Annuals or perennials 5–20 cm tall. Stems terete, erect or creeping, simple, branched, or caespitose, basally densely white hirsute, apically glabrous or glabrescent; internodes shorter to longer than leaves. Leaves opposite, usually at least some and occasionally all in a dense whorl, sessile; leaf blade ovate, oblong, or linear-lanceolate, 2–13 × 1–5 mm,

herbaceous, abaxially hirsute on midrib, adaxially hirsute but glabrescent, rarely both surfaces ± glabrous, base broadly cuneate to attenuate, margin hirsute, apex obtuse to acuminate; lateral veins inconspicuous, 3 per side. Inflorescences terminal, sometimes also subterminal, long pedunculate, umbel-like, often irregularly compound, rarely reduced to a single long pedicellate flower; bracts ovate to ovate-lanceolate, ca. 3 mm, ciliate. Pedicel 5–9 mm. Calyx 1.5–2.8 mm; lobes narrowly triangular, as long as tube. Corolla white, pale yellow, or rarely bluish white, campanulate, 3–8 mm, inside often sparsely bearded; lobes suborbicular, to 1.5 mm. Stamens included; filaments 1.5–3 mm; anthers narrowly ovate to sagittate, apex acute. Pistil to 4.5 mm. Ovary ca. 1 mm. Styles free for lower 1/4 to 1/3; stigma 2-cleft. Fruiting pedicel ca. 1.5 cm. Capsule subglobose, ca. 3 mm in diam., base enclosed by calyx, apex opening by loculicidal slits; style free or connate toward apex. Seeds ellipsoid to angular, minutely reticulate to papillate. Fl. May–Aug, fr. Aug–Dec.

200–600 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hainan, Hunan, Jiangsu, Jiangxi, Taiwan, Yunnan, Zhejiang [Cambodia, India, Indonesia, Japan, Korea, Malaysia, Myanmar, Nepal, Philippines, Thailand, Vietnam; Australia].

- 1a. Stems erect, simple or few branched from base, leaves some or all in congested whorls, at least partly hirsute when young but glabrescent; inflorescences much longer than vegetative part of stem ..... 2a. var. *pygmaea*
- 1b. Stems ascending, much branched from base; leaves all opposite, glabrous or subglabrous except sometimes for ciliate margins; inflorescences all ± as long as vegetative part of stem.
  - 2a. Corolla 7–8 mm; leaf blade ovate or subovate, glabrous ..... 2b. var. *grandiflora*
  - 2b. Corolla 4–5 mm; leaf blade very narrowly elliptic, glabrous except for ciliate margins ..... 2c. var. *confertifolia*

2a. **Mitrasacme pygmaea** var. *pygmaea*

水田白(原变种) shi tian bai (yuan bian zhong)

*Androsace tonkinensis* Bonati; *Mitrasacme capillaris* Wallich; *M. chinensis* Grisebach; *M. galiifolia* Masamune & Syozi; *M. lutea* H. Lévillé; *M. malaccensis* Wight; *M. pygmaea* var. *malaccensis* (Wight) H. Hara.

Ephemerals to 20(–30) cm tall. Stems erect, simple or few branched from base. Leaves in a basal rosette or separated by internodes longer than leaves except for uppermost 2 pairs which form a whorl of 4 leaves; leaf blade ovate to oblong, less often linear-lanceolate, hirsute at least when young. Corolla 3–6 mm. Fl. Jun–Jul, fr. Aug–Dec.

Grassy open places; 200–600 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hainan, Hunan, Jiangsu, Jiangxi, Taiwan, Yunnan, Zhejiang [Cambodia, India, Indonesia, Japan, Korea, Malaysia, Myanmar, Nepal, Philippines, Thailand, Vietnam; Australia].

Medicinal.

**2b. *Mitrasacme pygmaea* var. *grandiflora*** (Hemsley) Leenhouts, Bull. Jard. Bot. Etat. 32: 455. 1962.

大花水田白 da hua shui tian bai

*Mitrasacme polymorpha* R. Brown var. *grandiflora* Hemsley in F. B. Forbes & Hemsley, J. Linn. Soc., Bot. 26: 118. 1889.

Annuals 6–14 cm tall. Stems ascending, much branched from base. Leaves all opposite, separated by internodes longer than leaves; leaf blade ovate to subovate, glabrous or subglabrous. Corolla 7–8 × ca. 5 mm. Fl. May–Aug, fr. Aug–Nov.

Grassy open places; 200–600 m. S Guangxi [Thailand, Vietnam].

**2c. *Mitrasacme pygmaea* var. *confertifolia*** Tirel in Aubréville, Fl. Cambodge, Laos & Vietnam 13: 88. 1972.

密叶水田白 mi ye shui tian bai

Perennials. Stems woody at base, ascending, much branched. Leaves all opposite, overlapping; leaf blade very narrowly elliptic, slightly leathery, glabrous except for ciliate margins. Corolla 4–5 mm. Fl. Jun–Aug, fr. Aug–Dec.

Grassy open places; 200–600 m. Guangdong, Guangxi [Cambodia, Vietnam].

