

15. GONOSTEGIA Turczaninow, Bull. Soc. Imp. Naturalistes Moscou 19(2): 509. 1846.

糯米团属 nuo mi tuan shu

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Hyrtanandra Miquel; *Memoralis* Buchanan-Hamilton.

Herbs perennial or subshrubs, sometimes diffuse, without stinging hairs. Leaves opposite or sometimes alternate in upper stems; stipules often persistent, lateral, intrapetiolar, free; leaf blade 3(–5)-veined, margin entire; cystoliths punctiform. Inflorescences axillary, glomerules of male and female flowers or unisexual (plants monoecious or dioecious); bracts small, membranous. Male flowers subglobose, apex abruptly truncate; perianth (3 or) 4 or 5, usually free, valvate, segments angled, transversely crested or villous; stamens as many as perianth lobes; filaments inflexed in bud; rudimentary ovary present. Female flowers: perianth tubular, often ovoid and beaked, constricted and 2–4-toothed at apex; staminodes absent. Ovary included; style present; stigma filiform, villous along 1 side, deciduous with style; ovule orthotropous. Achene enclosed by marcescent, always accrescent, and often longitudinally winged or ribbed perianth; pericarp often crustaceous, lustrous. $2n = 26$.

About three species: tropics and subtropics of Asia and Australia; three species in China.

Some authorities include *Gonostegia* within *Pouzolzia*.

- 1a. Leaves alternate in upper stem, becoming smaller and denser; female perianth tube 2(or 3)-winged 1. *G. pentandra*
- 1b. Leaves all opposite; female perianth tube 10–12-winged.
 - 2a. Leaf blade narrowly lanceolate, rarely narrowly ovate or elliptic, (1.2–)3–10 × (0.7–)1.2–2.8 cm; male perianth lobes 5; herbs prostrate or suberect 2. *G. hirta*
 - 2b. Leaf blade ovate, elliptic, rarely lanceolate, 0.4–3 × 0.2–0.8 cm; male perianth lobes (3 or)4; herbs ascending 3. *G. parvifolia*

1. *Gonostegia pentandra* (Roxburgh) Miquel, Ann. Mus. Bot. Lugduno-Batavi 4: 302. 1868–1869.

五蕊糯米团 wu rui nuo mi tuan

Urtica pentandra Roxburgh, Fl. Ind., ed. 1832, 3: 583. 1832; *Gonostegia pentandra* var. *akoensis* (Yamamoto) Masamune; *G. pentandra* var. *hypericifolia* (Blume) Masamune; *Memoralis pentandra* (Roxburgh) Weddell; *M. pentandra* var. *hypericifolia* (Blume) Weddell; *Pouzolzia hypericifolia* Blume; *P. pentandra* (Roxburgh) Bennett; *P. pentandra* var. *hypericifolia* (Blume) Masamune.

Herbs prostrate or ascending, often ± pendent at apex, or subshrubs to 50 cm tall, monoecious. Stems 4-angled, strigillose on ridges. Leaves opposite in lower stems, alternate in upper ones, becoming smaller and denser, stipules broadly ovate, ca. 1 mm; subsessile; leaf blade: in lower stem linear-lanceolate or oblong-elliptic, 0.9–5 × 0.5–1(–1.5) cm (in upper stem lanceolate or narrowly ovate, 0.6–4 cm), thinly papery; 3-veined, base rounded or subcordate, apex acuminate or acute. Glomerules bisexual, in upper stems. Male flowers: pedicel 2–3.5 mm; buds 2 mm in diam.; perianth lobes (4 or)5. Female flowers sessile: perianth tube ellipsoid, ca. 2 mm, longitudinally 2(or 3)-winged, apex indistinctly 2(or 3)-toothed. Achene black, ovoid, ca. 1.5 mm.

Moist places; 100–300 m. Guangdong, Guangxi, Hainan, Taiwan, Yunnan [Bangladesh, India, Indonesia, Myanmar, Pakistan, Papua New Guinea, Philippines Thailand, Vietnam].

2. *Gonostegia hirta* (Blume ex Hasskarl) Miquel, Ann. Mus. Bot. Lugduno-Batavi 4: 303. 1868–1869.

糯米团 nuo mi tuan

Pouzolzia hirta Blume ex Hasskarl in Teijsmann & Binnendijk, Cat. Hort. Bot. Bogor. 80. 1844, based on *Urtica hirta* Blume, Bijdr. Fl. Ned. Ind. 495. 1826, not Swartz (1797); *Driessenia sinensis* H. Léveillé; *Memoralis hirta* (Blume ex Hasskarl) Weddell.

Herbs, sometimes subshrubs, often prostrate, 50–100(–160) cm, monoecious or dioecious. Stems 4-angled distally, pubescent. Leaves opposite, stipules broadly ovate, ca. 2.5 mm; petiole 1–4 mm; leaf blade narrowly lanceolate, rarely narrowly ovate or elliptic, (1.2–)3–10 × (0.7–)1.2–2.8 cm, herbaceous or thinly papery, 3(or 5)-veined, adaxial surface sparsely strigillose or subglabrous, abaxial surface sparsely pubescent along veins or subglabrous, base subcordate or rounded, apex acuminate or acute. Glomerules often bisexual or sometimes unisexual, 2–9 mm in diam. Male flowers: pedicel 1–5 mm; buds ca. 2 mm in diam.; perianth lobes 5, oblanceolate, 2–2.5 mm, apex acute. Female flowers sessile; perianth tube ovoid, ca. 1.6 mm, longitudinally 10-winged, apex 2-toothed. Achene white to black, ovoid, ca. 1.4 mm. Fl. May–Jul, fr. Aug–Sep.

Weedy places, thickets by ditches and rice fields; 100–1000 (–2700) m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hainan, S Henan, Jiangsu, Jiangxi, S Shaanxi, Sichuan, Taiwan, SE Xizang, Yunnan [Asia, Australia].

The plants are used agriculturally as fodder for pigs and medicinally as treatment for boils and bone dislocations and fractures.

3. *Gonostegia parvifolia* (Wight) Miquel, Ann. Mus. Bot. Lugduno-Batavi 4: 303. 1868–1869.

台湾糯米团 tai wan nuo mi tuan

Pouzolzia parvifolia Wight, Icon. Pl. Ind. Orient. 6: 39, t.

2092, f. 1. 1853; *Gonostegia matsudae* (Yamamoto) Yamamoto & Masamune; *G. neurocarpa* (Yamamoto) Yamamoto & Masamune; *Memorialis matsudae* Yamamoto; *M. neurocarpa* Yamamoto; *M. parvifolia* (Wight) Weddell.

Herbs or subshrubs ascending, ca. 25 cm, monoecious.

Stems hirsute. Leaves all opposite, stipules broadly triangular-ovate, 1–1.5 mm; petiole absent or nearly so; leaf blade ovate, elliptic, or rarely lanceolate, 0.4–3 × 0.2–0.8 cm, herbaceous, 3-veined, often inconspicuous, both surfaces subglabrous or somewhat hirsute, base rounded or truncate, apex obtuse or slightly acute. Glomerules bisexual, 2–9 mm in diam. Male flowers: pedicel 0.5–1 mm; buds ca. 1.2 mm in diam.; perianth lobes (3 or)4, obovate, ca. 1.1 mm, apex acute. Female flowers shortly pedicellate; perianth tube ovoid-ellipsoid, ca. 1.2 mm, always longitudinally 10–12-ribbed. Achene brownish to black, ovoid, ca. 1 mm. Fl. Apr–Jul, fr. Jul–Aug.

Open wet places at roadsides, grassy places in montane forests; 300–1500 m. Taiwan [Philippines, Sri Lanka].

