Fl. China 19: 217. 2011.

51. MITCHELLA Linnaeus, Sp. Pl. 1: 111. 1753.

蔓虎刺属 man hu ci shu

Chen Tao (陈涛); Charlotte M. Taylor

Chamaedaphne Mitchell; *Perdicesca* Provancher.

Herbs, perennial, unarmed, creeping, rooting at nodes. Raphides present. Leaves opposite, without domatia; stipules generally persistent, interpetiolar, triangular, entire to deeply 3(–5)-lobed, often glandular at apex. Inflorescences terminal or pseudoaxillary near stem apices, 2-flowered, pedunculate, ebracteate. Flowers sessile, bisexual, distylous, fused in pairs by their ovaries. Calyx with ovary portion of individual flowers subglobose, with structure formed by fused ovaries oblate to dicoccous, with limb of individual flowers (3 or)4-lobed. Corolla white, funnelform, pilose in throat and onto lobes; lobes (3 or)4, valvate in bud. Stamens (3 or)4, inserted in corolla throat, exserted in short-styled flowers, included in long-styled flowers; filaments stout; anthers basifixed. Ovary of individual flowers 4-celled, ovules 1 in each cell, axile; stigmas 4, linear, exserted in long-styled flowers, included in short-styled flowers. Fruit multiple, orange to red, drupaceous, subglobose to oblate, fleshy, with calyx limbs 2, persistent; pyrenes 8, 1-celled, each with 1 seed, angled, 3-ridged; seeds medium-sized, ellipsoid; endosperm corneous; embryo small; radicle hypogynous.

Two species: one in E Asia (China, Japan, Korea), the other in Central America (Guatemala) and E North America (Canada, Mexico, United States); one species in China.

Y. Z. Ruan (in FRPS 71(2): 159. 1999) gave the number of calyx lobes, corolla lobes, and stamens as 3 or 4; in general, the flowers of *Mitchella* are considered 4-merous, although throughout Rubiaceae occasional individual flowers vary from the “characteristic” in having fewer or more calyx lobes, corolla lobes, and infrequently also stamens.

1. Mitchella undulata Siebold & Zuccarini, Abh. Math.-Phys. Cl. Königl. Bayer. Akad. Wiss. 4(3): 175. 1846.

蔓虎刺 man hu ci

Mitchella repens Linnaeus var. *undulata* (Siebold & Zuccarini) Makino.

Plants with stems quadrate, to 30 cm, glabrous or subglabrous. Petiole 0.3–1.1 cm, glabrous or subglabrous; leaf blade drying papery, triangular-ovate or ovate, 0.2–2.1 × 0.2–1.5 cm, both surfaces glabrous, base truncate or cordulate to rounded, margins sometimes undulate, apex acute to rounded; secondary veins 2 or 3 pairs; stipules 1–1.5 mm. Flowers with peduncles 1–12 mm, glabrous. Calyx glabrous; ovary portion subglobose to turbinate, ca. 2 mm; limb deeply lobed; lobes narrowly to broadly triangular, 0.5–1 mm. Corolla glabrous outside; tube 9–10 mm; lobes lanceolate to triangular, 4–5 mm, acute. Multiple fruit subglobose, 6–8 mm in diam., glabrous; pyrenes ca. 2.5 mm. Fl. autumn, fr. winter.

Understories of wet forests. Taiwan, Zhejiang [Japan, Korea].

In Fl. Taiwan (ed. 2, 4: 297. 1998) Liu and Yang reported the plants there are evergreen. Y. Z. Ruan (in FRPS 71(2): 159. 1999) described the leaf blades as unequal and gave measurements for large ones and small ones without further explanation. All other authors reported this species to be generally isophyllous, which corresponds to specimens seen. The leaf description by Ruan may apply to the variable leaf sizes along the stems of some plants, rather than consistent size differences between the two leaves at a single stem node.

Fl. China 19: 217. 2011.