Rhododendron qiaojiaense (Ericaceae), a new species from Yunnan, China

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Rhododendron qiaojiaense L.M. Gao & D.Z. Li, sp. nova (Figs. 1 and 2) is described from northeastern Yunnan, China, and illustrated. The new species is compared with the morphologically similar R. decorum and R. vernicosum.

Key words: Ericaceae, new species, Rhododendron, taxonomy

Rhododendron is a large genus of the family Ericaceae (Yang et al. 1999, Wu et al. 2003), consisting of about 1000 species traditionally divided into eight subgenera; it is widely distributed in the northern hemisphere (Chamberlain et al. 1996, Fang et al. 2005). However, based on RPB2 gene sequence data, only three subgenera in Rhododendron were recently suggested (Goetsch et al. 2005). A total of 571 species occur in China (Fang et al. 2005). Subsection Fortunea is one of the 24 subsections of subgenus Hymenanthes (Chamberlain et al. 1996), with 31 species, of which 28 are endemic to China (Fang et al. 2005).

During an expedition to the Yaoshan nature reserve of Yunnan in May 2005, we found a population of Rhododendron that resembled R. decorum. After a careful morphological study, literature search (Chamberlain 1982, He et al. 1994, Fang et al. 2005), and examination of many specimens, it became clear that these plants represented a new species of Rhododendron subgenus Hymenanthes, subsection Fortunea.

Rhododendron qiaojiaense L.M. Gao & D.Z. Li, sp. nova (Figs. 1 and 2)

Species nova affinis R. decori, sed laminis oblongis vel late oblongis, base truncatis vel rotundis, corollis late campanulatis, ceraceis, caducis maturitate, filamentis 1.5–2 cm longis, glabris differt.

Etymology. The epithet of the new species refers to its geographical distribution in Qiaojia County, northeastern Yunnan province of China.

Type: China. Yunnan Province: Qiaojia County, Oiaoshan primitive forest, 27°11′24″N, 103°04′34″E, alt. 2600–2700 m, 25.V.2005 L. M. Gao, S. D. Zhang & N. N. Lin 03-1686 (holotype KUN; isotype KUN)

Evergreen shrubs or small trees, 2–4 m tall; young branches robust, yellow-green, old branches gray brown, glabrous. 4–5 leaves clustered at end of branches, pseudo-verticillate; petiole cylindric, 3–4 cm long, glabrous; leaf blade thickly leathery, oblong to broadly oblong,
5.5–11 × 3–5 cm; apex obtuse to rounded, rarely acute; base truncate or rounded, rarely slightly cordate; adaxial surface dark green, shiny; abaxial surface pale green, glabrous; midrib prominent abaxially, lateral veins 13–15, flat abaxially, impressed adaxially, veins reticulate, conspicuous. Inflorescence terminal, lax, 8–10-flowered, botryose umbellate; rachis 20–25 mm long, sparsely glandular. Pedicel 2.5–4.5 cm long, glandular-hairy, white; calyx lobes 7, small, ca. 1 mm long, triangular, glandular and gland-fringed; corolla broadly campanulate, pink to pink-purple, thickly ceraceous, caducous in anthesis, lacking a blotch or flecks inside; 4–4.5 cm long, 5–6 cm in diameter, outer surface glabrous; lobes 7, obovate, 1.5–1.8 cm; apex entire; stamens 14, unequal, filaments white, glabrous, 1.5–2 cm long, anthers oblong-elliptic, yellow brown, 2–3 mm long; ovary conical, ca. 5 × 3 mm, densely white glandular; style 2–3 cm long, densely white glandular-hairy to tip, rarely pink purple, equal or slightly longer than corolla; stigma capitate, green or purple, small, diameter ca. 2 mm. Capsule cylindric, slightly curved, roughened, glandular hairy. Flowering from May to June.
Rhododendron qiaojiaense grows at the edge of mixed forest, or in mixed forest together with R. pachytrichum, R. argyrophyllum, Enkianthus deflexus and Taxus wallichiana var. chinensis etc. between 2600 and 2700 m. It is known only from the type locality in Qiaoshan, Qiaojia County, in the northeast part of Yunnan province (Fig. 3).

Rhododendron qiaojiaense resembles R. decorum and R. vernicosum, especially in the leathery leaf blade, small calyx, glandular-hairy pedicel, glabrous outer surface of corolla, densely glandular ovary, and glandular-hairy style. The major morphological differences among R. qiaojiaense, R. decorum and R. vernicosum are summarized in Table 1.

The geographic ranges of these three species are different. Rhododendron qiaojiaense is
known only from the NE of Yunnan, where it is sympatric with *R. decorum*. However, *R. decorum* occurs also in SW China, i.e. west Guizhou, southwest Sichuan, Yunnan and SE Xizang. *Rhododendron vernicosum* is endemic to SW China, occurring in NW Yunnan, SW Sichuan and SE Xizang.

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References


