
A NEW SPECIES OF *RHODODENDRON* (*ERICACEAE*) FROM CHINA

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A new species of *Rhododendron* (*Ericaceae*), *R. truncatovarium* (subgen. *Azaleastrum*), from Yunnan, SW China, is described and illustrated. Details of its pollen morphology are also provided.

Keywords. China, morphology, new species, pollen, *Rhododendron truncatovarium*, Yunnan.

INTRODUCTION

The genus *Rhododendron* L. (*Ericaceae*) is a large and diverse genus of about 1000 species (Chamberlain *et al.*, 1996). Subgenus *Azaleastrum*, defined as having lateral inflorescences and leaves without lepidote scales, is divided into four sections: *Azaleastrum*, *Choniastrum*, *Mumeazalea* and *Candidastrum* based on the number of stamens, the nature of the calyx and seeds, and persistent or deciduous leaves (Sleumer, 1949, 1980). However, Philipson & Philipson (1986) raised sections *Mumeazalea* and *Candidastrum* to subgeneric rank, leaving only sections *Azaleastrum* and *Choniastrum* in subgenus *Azaleastrum*. Subgenus *Azaleastrum* includes approximately 24 species and is distributed mainly in S China (He *et al.*, 1994). The new species has been collected several times from SE Yunnan and was previously identified as *R. moulmainense* Hook.f., which it resembles in the following characters: glabrous leaves with elliptic or elliptic-lanceolate blades; glabrous petioles; 3-flowered (rarely 2-flowered) inflorescences; calyx rim undulate, glabrous, and ovary glabrous. *Rhododendron truncatovarium* differs from *R. moulmainense* in its grey puberulent flower bud-scales, smaller pink corollas, and truncate ovary apex, *R. moulmainense* having glabrous flower bud-scales, larger white corollas, and a tapering ovary.

***Rhododendron truncatovarium* L.M.Gao & D.Z.Li, sp. nov. Fig. 1.**

Species *R. moulmainense* Hook.f. affinis, sed corollis minoribus, roseolis; ovariis elongato-cylindricis, apice truncatis differt.

Type: China, SE Yunnan, Guangnan Xian, Hua-guoo-da-ching mountain, 25 iii 1940, C.W. Wang 88155 (holo. KUN, iso. E).

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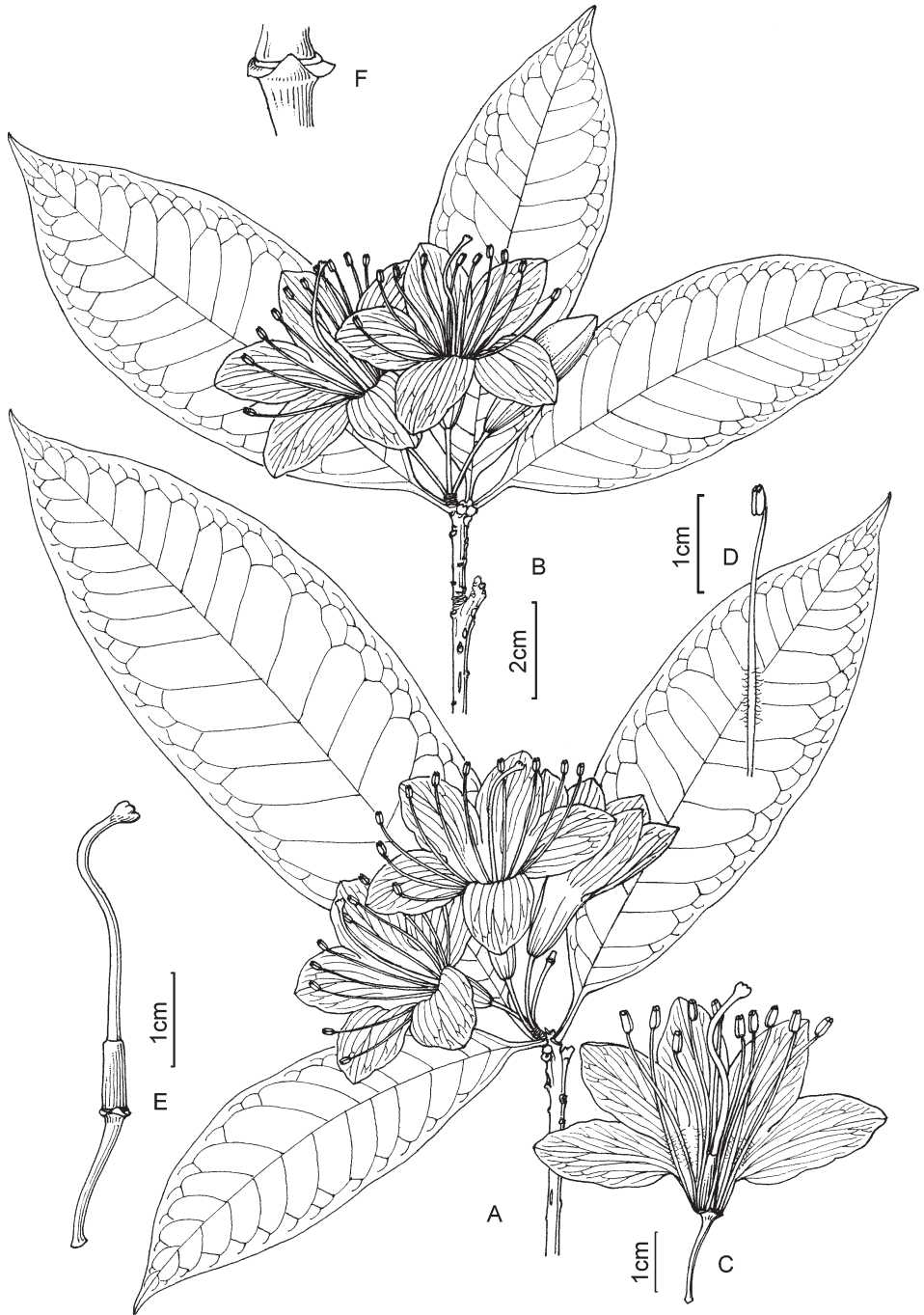


FIG. 1. *Rhododendron truncatovarium* L.M.Gao & D.Z.Li. A & B, flowering branches with leaves; C, flower with stamens and pistil; D, stamen; E, pistil; F, calyx. Drawn by Xilin Wu from the holotype (C.W. Wang 88155).

Evergreen tree to 10m high; young branches terete, grey, glabrous. *Leaves* clustered at ends of branches, pseudo-verticillate; blades lanceolate or elliptic-lanceolate, 8–15 × 3–5cm, apex acuminate or long-acuminate, base cuneate, margin slightly revolute, green above, pale green below, glabrous; midrib depressed above, prominent beneath; lateral veins in 12–15 pairs, prominent on both sides; reticulate veins inconspicuous. *Petioles* 1–1.5cm, grooved above, glabrous. *Inflorescences* lateral, 3-flowered, umbellate; rhachis brown, glabrous, c.5mm long; pedicels 1.5–2cm long, glabrous. *Calyx* rim undulate, lobes 5, triangular, 0.5–1mm long, glabrous. *Corolla* pink, narrowly funnel-shaped, 3.5–4cm long, glabrous outside; lobes 5, oblong or oblong-obovate, apex slightly convex, 2.5–3cm long, corolla tube 1–1.3cm long; upper lobe with yellow blotch inside. *Stamens* 10, slightly longer than corolla; filaments 3–3.5cm long, puberulent in lower third, glabrous near base; anthers ovate, 2–3mm long, purple. *Ovaries* cylindric, c.5mm long, glabrous, apex truncate; styles glabrous, 3.5–4cm long. *Fruit stalks* glabrous, 2.5–3.5cm long; capsules narrowly cylindric, 3.5–5cm × 3–4mm, glabrous.

Distribution. China: C and SE Yunnan. Fig. 2.

Habitat. In mixed or evergreen broad-leaved forest, 700–2000m.

Additional specimens examined. CHINA. Yunnan, Guangnan Xian, Hua-guoo-da-ching mountain, 27 iii 1940, C. W. Wang 88159 (KUN); Guangnan Xian, Tan-sing-tza, 1550m, 25 iii 1940, C. W. Wang 87982 (IBSC, KUN, PE); Xichou Xian, Fadou, 1300m, 16 xii 1939, C. W. Wang

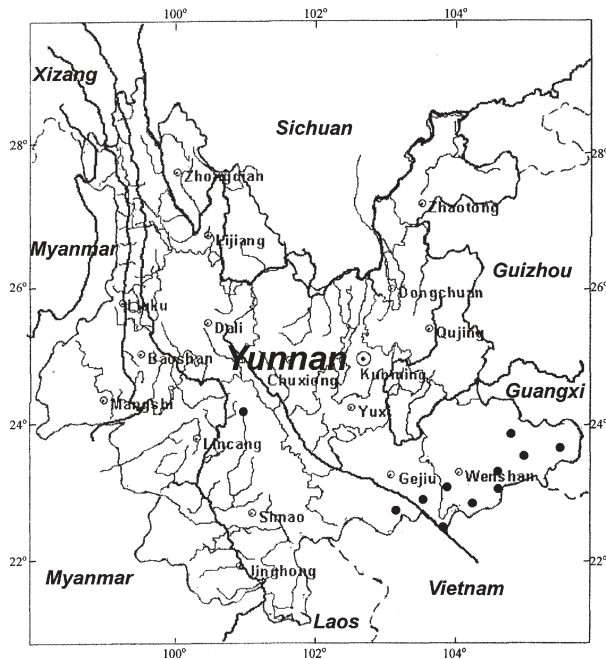


FIG. 2. Distribution of *Rhododendron truncatovarium* L.M.Gao & D.Z.Li.

85767 (IBSC, KUN), *ibid.*, 1450–1550m, 15 ix 1947, *K.M. Feng* 11740 (KUN, PE), *ibid.*, 1550m, 3 vi 1964, *Q.A. Wu* 7681 (KUN), *ibid.*, 1500m, 12 iv 1981, *C.H. Yang* 81-0139 (KUN); Maguan Xian, 1600m, 13 iii 1933, *H.T. Tsai* 51944 (KUN), *ibid.*, 7 xi 1947, *K.M. Feng* 13682 (KUN); Malipo Xian, Laojunshan, 26 v 1962, *K.M. Feng* 22869 (KUN); Jinping Xian, 21 xi 1958, Collector unknown L01250 (KUN); Funing Xian, Baan-luen, 18 iv 1940, *C.W. Wang* 88634, 88687 (IBSC, KUN), *ibid.*, 19 iv 1940, *C.W. Wang* 88698 (KUN); Wenshan Xian, Laojunshan, 19 v 1962, *K.M. Feng* 22571 (KUN); Jingdong Xian, Wuliangshan, 5 vi 1963, *Q.A. Wu* 9448 (KUN); Wenpu, 10 v 1963, *Q.A. Wu* 9008 (E, KUN).

POLLEN MORPHOLOGY

The pollen morphology of *R. truncatovarium* under the scanning electron microscope (SEM) is shown in Fig. 3. The grains are arranged in tetrahedral tetrads, each grain being spheroidal or subspheroidal and tricolporate. The exine surface is compact and granulate, similar to that of *R. tutcheriae* Hemsl. & E.H.Wilson, *R. mackenzianum* Forrest and *R. latoucheae* Franch., but different from that of *R. moulmainsense* Hook.f., which is compact and inconspicuously granulate in the mesocolpia and nearly smooth at the polar region and around the aperture (Gao *et al.*, 2002).

ACKNOWLEDGEMENTS

We thank the Keepers of the Herbaria and Librarians of the Royal Botanic Garden Edinburgh (E), the Royal Botanic Gardens, Kew (K), Kunming Institute of Botany (KUN), Institute of Botany (PE) and South China Institute of Botany (IBSC), for access to their facilities. We also thank Professor Rhuicheng Fang for discussions and comments on this species and Xilin Wu for drawing Fig. 1. This

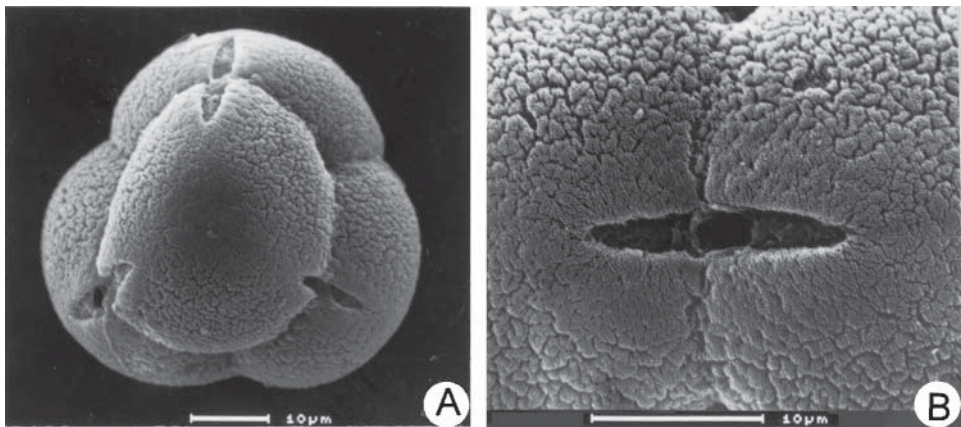


FIG. 3. Scanning electron micrographs of pollen grains of *Rhododendron truncatovarium* L.M. Gao & D.Z.Li.

work was funded by a keynote project in biology of the Knowledge Innovation Program of the Chinese Academy of Sciences (KSCX 2-1-06B).

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Received 23 January 2002; accepted after minor revision 24 November 2003