

## *Rhododendron yunyianum* (Ericaceae), a new species from Fujian, China

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*Rhododendron yunyianum* X.F. Jin & B.Y. Ding (Ericaceae), *sp. nova* of subgen. *Tsutsusi* is described and illustrated from Fujian, China. It is morphologically similar to *R. taipaoense* and *R. simsii*, but differs from them mainly in having young shoots with both setose and strigose hairs, conspicuous calyx lobes, narrowly funnelliform corollas, and 7–10 stamens.

Key words: Ericaceae, new species, *Rhododendron* subgen. *Tsutsusi*, taxonomy

*Rhododendron* subgen. *Tsutsusi*, comprising ca. 110 species, is mainly distributed in Sino–Japan (He 1994, Yamazaki 1996, He & Chamberlain 2005). The subgenus was earlier divided into three sections, i.e. sect. *Tsutsusi*, sect. *Brachycalyx* and sect. *Tsusiopsis* (Sleumer 1949, 1980). Sect. *Tsusiopsis* now is merged into sect. *Brachycalyx* (Chamberlain & Rae 1990, Yamazaki 1996, Jin 2006). China has about 80 species in subgen. *Tsutsusi*, with a center of diversity in the mountainous region of south China (He 1994, He & Chamberlain 2005).

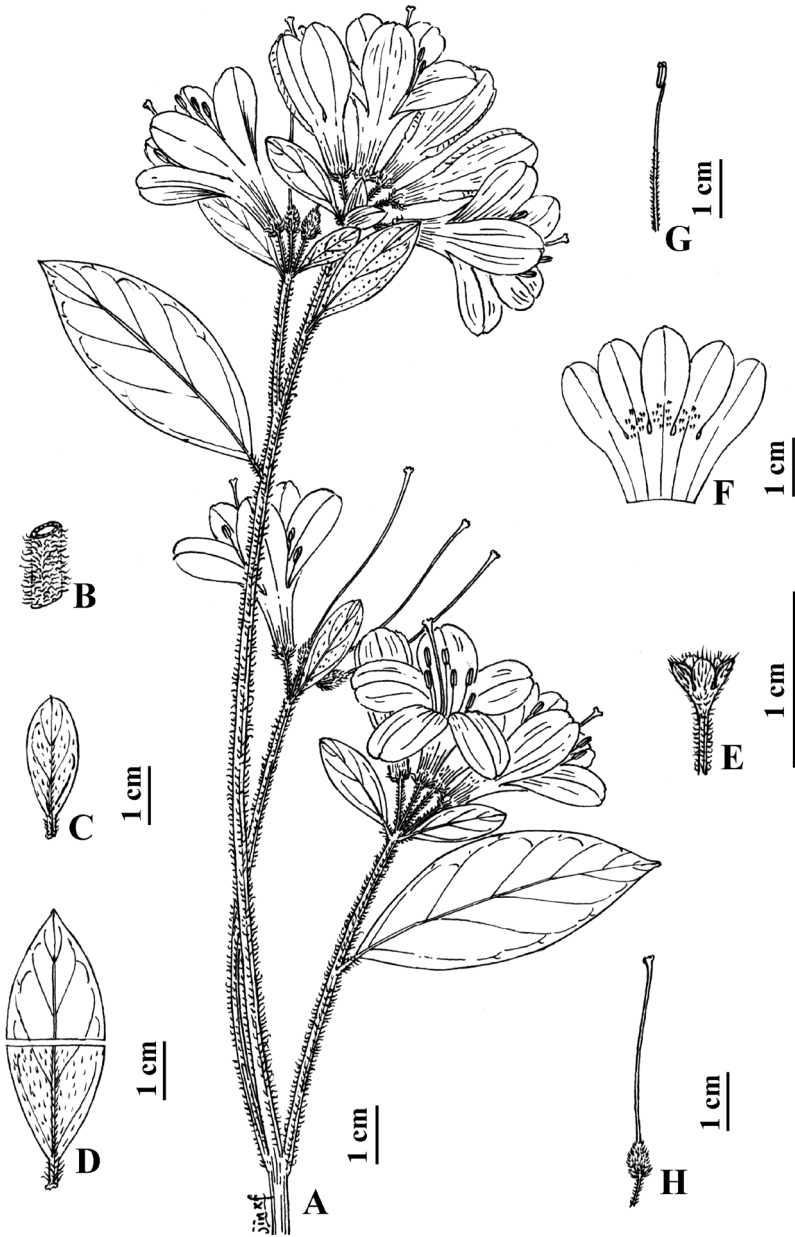
In August 2004, the author Jin examined the collections of subgen. *Tsutsusi*, which were conserved in IBSC (Herbarium of South China Botanical Garden). A specimen, *B.T. Zhuang 85030*, looked peculiar because of its young shoots with both setose and strigose hairs, and 7–10 stamens. In the spring of 2005, the author Ding collected living specimens with similar

characters, which made further examination possible. Based on these findings, we describe here a new species.

***Rhododendron yunyianum* X.F. Jin & B.Y. Ding, *sp. nova* (Fig. 1)**

*Species nova* *R. taipaoensi* T.C. Wu & P.C. Tam *affinis*, a quo ramulis setaceis et strigosis (nec setaceis et glandulo-pilosis), corollis anguste infundibuliformis (nec tubuloso- infundibuliformis), staminibus 7–10 (nec 5) differt. *Species etiam affinis* *R. simsii* Planch., sed ramulis setaceis et strigosis (nec strigosis), corollis anguste infundibuliformis (nec infundibuliformis), staminibus 7–10 (nec 10) differt.

TYPE: China, Fujian, Anxi County, Lutian, Kutiankeng, in thickets, alt. 650 m, 21.IV.2005 B.Y. Ding & H.S. Zhang



**Fig. 1.** *Rhododendron yunyianum* (from the holotype, drawn by Xiao-Feng Jin). — **A:** Flowering shoot. — **B:** Young shoot (showing indumentum). — **C:** Leaf (showing indumentum). — **D:** Leaf (showing indumentum). — **E:** Calyx. — **F:** Corolla. — **G:** Stamen. — **H:** Style and ovary.

8052 (holotype HTC = Herbarium of Hangzhou Normal University; isotype ZM).

Evergreen shrub; young shoots densely strigose and spreading-setose, shoots almost glabrous. Leaves frequently aggregated at shoot apex; lamina thinly coriaceous, long-elliptic to elliptic,  $1-4.5 \times 0.5-1.5$  cm, obtuse and mucronate at apex, cuneate at base, entire, adaxially

subglabrous, abaxially strigose; costa and lateral veins projecting on lower surfaces; petiole 3–6 mm long, densely strigose and setose. Umbel 4–6-flowered; pedicel 6–8 mm long, strigose. Calyx 5-lobed; lobes green, ovate-rounded,  $2-4 \times 2$  mm, strigose. Corolla purplish pink, narrowly funnelform, 2.4–2.8 cm long, 5-lobed; lobes spreading, oblong,  $13-15 \times 7-8$  mm, glabrous on both surfaces, the upper with dark

purple blotches at base; tube 13–15 mm long, glabrous on both sides. Stamens 7–10, frequently 8, unequal in length; filaments compressed, 18–25 mm long, slightly longer than corolla or equal in length, with sparse pubescence on lower half; anthers oblong, ca. 2 mm long, poricidal at apex. Ovary ovoid, ca. 3 mm long, densely strigose; style extended from corolla, 32–35 mm long, longer than stamens, glabrous; stigma capitate, 1–1.5 mm in diam. Capsule not seen.

*Rhododendron* subgen. *Tsutsusi* has four recognized types of indumentum on the young shoots, i.e. strigose, setose, glandular and filiform (pilose) hairs (Seithe 1980, Jin 2006). *Rhododendron yunyianum* can be easily recognized as belonging to subgen. *Tsutsusi*, characterized by its habit, and young shoots with both strigose and setose hairs. The differences among this new species and the morphologically similar *R. taipaoense* and *R. simsii* are summarized in Table 1.

*Rhododendron yunyianum* occurs in central to southern Fujian Province, China (Fig. 2). It is named in honour of Professor Yun-Yi Fang (1918–2003), who devoted her life to the study of Chinese *Lysimachia* and *Indigofera*.

ADDITIONAL SPECIMENS EXAMINED (paratype). — **China.** Fujian, Anxi County, Lutian, Kutiankeng, under conifer forests, alt. 720 m, 21.IX.2005 *B.Y. Ding & H.S. Zhang* 8038 (HTC). Youxi County, from Zhongxian to Youxi City, alt. 470 m, 26.IV.1985 *B.T. Zhuang* 85030 (IBSC).



Fig. 2. Geographic distribution of *Rhododendron yunyianum* (●).

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Table 1. Comparison of morphological characters among *Rhododendron yunyianum*, *R. taipaoense* and *R. simsii*.

Character	<i>R. simsii</i>	<i>R. yunyianum</i>	<i>R. taipaoense</i>
Indumentum of young shoots	compressed strigose	densely strigose and spreading setose	spreading setose and glandulo-pilose
Indumentum on leaves	compressed strigose	compressed strigose	densely setose
Flower number of each inflorescence	2–5 flowers	4–6 flowers	4–16 flowers
Lobe shape of calyx	ovate or oblong-ovate, 4–5 × 2–4 mm	ovate-rounded, 2–4 × 2 mm	unconspicuous
Corolla color	red or darkly red	purplish pink	pink
Corolla length	35–40 mm	24–28 mm	20–32 mm
Corolla shape	funnelform	narrowly funnelform	tubular-funnelform
Lobe shape of corolla	obovate	oblong	oblong-lanceolate
Stamen number	10	7–10, frequently 8	5
Indumentum of filaments	pubescence on lower half	sparse pubescence on lower half	glabrous or slightly pubescent on lower half

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