

# 中国贵州杜鹃属两新种

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**摘要:** 报道了中国贵州杜鹃属植物 2 新种——枇杷叶杜鹃(*Rhododendron eriobotryoides* Xiang Chen & Jia Y. Huang) 和金波杜鹃(*R. jinboense* Xiang Chen & X. Chen)。枇杷叶杜鹃与皱叶杜鹃(*R. demudatum*)相似, 但本种叶背毛被较薄而稀疏, 花丝基部密被微柔毛, 花柱通体被腺体。金波杜鹃与短脉杜鹃(*R. brevinerve*)相似, 但前者的叶长圆状椭圆形, 叶片上卷呈 U 形, 花序具较多花, 花冠较长, 花丝基部密被微柔毛, 子房密被绒毛。目前, 仅发现 2 新种各有 1 个含数株的种群, 资源量十分稀少, 依据 IUCN 红色名录标准均属于极危物种(CR), 需要加以重点保护。

**关键词:** 枇杷叶杜鹃; 金波杜鹃; 杜鹃属; 新种; 贵州; 中国

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## Two New Species of *Rhododendron* (Ericaceae) from Guizhou, China

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**Abstract:** Two new species, *Rhododendron eriobotryoides* Xiang Chen & Jia Y. Huang and *R. jinboense* Xiang Chen & X. Chen (Ericaceae), from Guizhou Province, China are described and illustrated. *Rhododendron eriobotryoides* is close to *R. demudatum* from which it differs by having thinner and sparser flocculence on the leaf blade abaxial surface, puberulent filaments, and a glandular style. *Rhododendron jinboense* differs from the most morphologically similar species *R. brevinerve* by the former's oblong-elliptic and U-shaped leaf blades, a more floriferous inflorescence, a longer corolla, puberulent filaments, and a densely tomentose ovary. Both of the new species are Critically endangered, (CR), based on the IUCN Red List Categories and Criteria, therefore, careful protection is highly desired.

**Key words:** *Rhododendron eriobotryoides*; *Rhododendron jinboense*; *Rhododendron*; New species; Guizhou; China

Baili Rhododendron Nature Reserve, a highland located in the northwest Guizhou, contains one of the largest natural *Rhododendron* communities in the world<sup>[1]</sup>. The Nature Reserve is characterized by an assemblage of *Rhododendron* plants covering 125.8 km<sup>2</sup> and including six subgenera, six sections,

seven subsections and approximately 35 species. From the year 2007 to 2009, through an intensive taxonomic survey on the genus in the Nature Reserve, we found that two species were undescribed based on careful examination of specimens and relevant literature<sup>[2-13]</sup>.

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*Rhododendron eriobotryoides* Xiang Chen & Jia Y. Huang, sp. nov. Figs. 1 and 2A.

(*R.* subgen. *Hymenanthes* (Blume) K. Koch, sect. *Ponticum* G. Don, subsect. *Argyrophylla* (Tagg) Sleumer)

Species *R. denudatum* H. Léveil. similis, sed foliis infra indumentis tenuis et parcis, filamentis prope basin puberulis, et stylo glanduloso differt.

Small evergreen shrubs, 3.5 m tall; bark rough; young shoots brown tomentose. Petiole slightly grooved, 1.5 ~ 2.5 cm, densely yellowish brown tomentose; leaf blade oblanceolate or elliptic, 10 ~ 19 cm × 2.3 ~ 4.5 cm; base cuneate, slightly oblique; margin slightly undulate; apex acute; adaxial surface dark green, rugulose, glabrous; abaxial surface pale yellowish green or grayish green, with indumentum 2-layered, upper layer yellow-brown or gray-white, sparse, floccose, more or less deciduous, lower layer pale yellowish-white, thin, appressed, shiny, persistent; midrib grooved adaxially, prominent abaxially; lateral veins 18~22-paired, grooved adaxially, raised abaxially. Inflorescence racemose-umbellate, 6 ~ 9-flowered; rachis 6 ~ 8 mm, pale yellow pubescent. Pedicel reddish, 13 ~ 20 mm, densely pale yellow pubescent and brown glandular-hairy; calyx undulate, 1~1.5 mm, glandular and pubescent, lobes 5; corolla campanulate or tubular-campanulate, pale pink or pink, 3.8 ~ 5.3 cm long, 4.2~5.5 cm wide when flattened, with deep reddish brown spots, outer surface glabrous, puberulent within towards base, without nectar pouches, lobes 5, suborbicular, ca. 1.5 cm, slightly emarginated; stamens 10, unequal, 2.5~3.5 cm, filaments puberulent towards base, anthers brownish, 2 ~ 2.5 mm; ovary conoid, ca. 7 mm, densely pale yellowish white tomentose; style whitish, 4 ~ 4.5 cm, glandular to tip, pubescent at base; stigma brownish, ca. 1.5 mm wide. Capsule cylindric, small, 1.1 ~ 1.8 cm long, tomentose. Fl. Mar. ~ Apr., fr. Sep. ~ Oct.

**Distribution and habitat:** China. Guizhou: Baili Rhododendron Nature Reserve, Pudi, 27°13'N, 105°51'E, alt. 1656 m, slope, in thickets dominated by *R. delavayi* Franch. and *R. irroratum* Franch., 29 Mar.

2009, Xiang Chen 09034 (holotypus, HGAS); Same locality, 21 Apr. 2008, Xiang Chen 08020 (paratypus, HGAS; isotypus, IBSC).

**Etymology:** The species is named after the phenomenon that its leaf blades are similar to those of the loquat.

This species is close to *Rhododendron denudatum* H. Léveil. but differs mainly by having thinner and sparser flocculence on the leaf blade abaxial surface (vs. denser tomentum on the leaf blade abaxial surface), puberulent filaments (vs. glabrous filaments), and a glandular style (vs. a glabrous style).

Since there is only one population including three mature individuals of this species found in the area, we could make a preliminary assessment that the conservation status for the species is critically endangered, (CR), based on criterion D, population less than 50 mature individuals, in the IUCN Red List Categories and Criteria<sup>[14]</sup>. Therefore, careful protection for the species is highly desired. The current major threats to the species are habitat loss (agriculture) and human disturbance (recreation/tourism) since its locality is a scenic spot in a rural mountain area. Fortunately, a few seedlings were found under the mature individuals, and one of the authors, Jiayong Huang, has collected the seeds and begun a propagation experiment.

*Rhododendron jinboense* Xiang Chen & X. Chen, sp. nov. Figs. 2B and 3.

(*R.* subgen. *Hymenanthes* (Blume) K. Koch, sect. *Ponticum* G. Don, subsect. *Irrorata* (Tagg) Sleumer)

Species *R. brevinerve* Chun & W. P. Fang similis, sed foliis oblongo-ellipticis, U-formibus, floribus 9 ~ 14, corolla 5 ~ 5.5 cm longa, filamentis prope basin puberulis, ovario dense tomentosum differt.

Evergreen shrubs, ca. 3.5 m tall; bark rough; branchlets glabrescent; Petiole 1.3~2 cm, glabrescent; leaf blade strongly rolled adaxially forming a U-shaped cross section, oblong-elliptic, 10~16 cm × 2.5~4 cm; base cuneate; apex acute or shortly acuminate; adaxial surface green, glabrous; abaxial surface pale green, glabrous; midrib slightly grooved adaxially, prominent

abaxially; lateral veins 15~17-paired, obscure adaxially, slightly raised abaxially. Inflorescence racemose-umbellate, 9~14-flowered; rachis ca. 20 mm, with dense shiny pale yellowish-white pubescence. Pedicel reddish, 1.3~1.7 cm, densely glandular-hairy and somewhat pubescent; calyx minute, 1.5~2 mm, lobes widely triangular, glandular and pubescent; corolla campanulate to broadly campanulate, pale pink, with no or very few spots, 5~5.5 cm long, 5~6 cm wide when flattened, lobes 5, suborbicular, ca. 2 cm, emarginated, tube outside glabrous, inside base puberulent, without nectar pouches; stamens 10, unequal, 2.8~4 cm, filaments

puberulent below, anthers reddish-brown, ca. 3 mm; ovary conoid, ca. 8 mm, densely pale yellowish-white tomentose and slightly glandular; style greenish-white, 4.3~4.8 cm, glandular and pubescent towards base, sometimes glandular-hairy to the tip or glabrescent; stigma reddish, ca. 2 mm wide. Capsule cylindrical, straight or slightly curved, 1.8~2.1 cm long. Fl. Mar. ~ Apr., fr. Sep. ~ Oct.

**Distribution and habitat:** China. Guizhou: Baili Rhododendron Nature Reserve, Jinpo, 27°10'N, 105°56'E, alt. 1608 m, small rocky tomb in open area, 30 Mar. 2009, Xiang Chen 09040 (holotypus, HGAS; isotypus, IBSC).

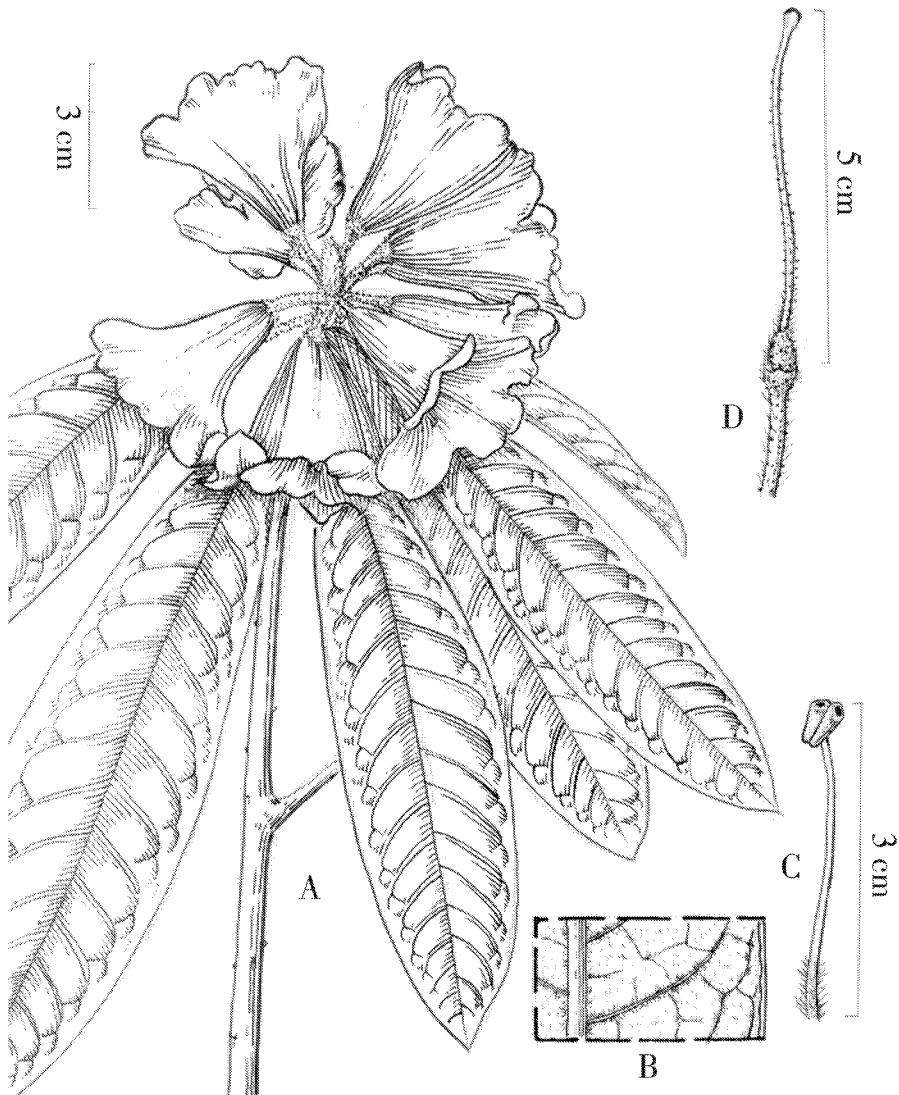


Fig. 1 *Rhododendron eriobotryoides* Xiang Chen & Jia Y. Huang

A. Flowering branch; B. Enlarged part of leaf blade abaxial surface; C. Filament; D. Gynoecium.

[Drawn by H. Xie from the holotype Xiang Chen 09034(HGAS)]

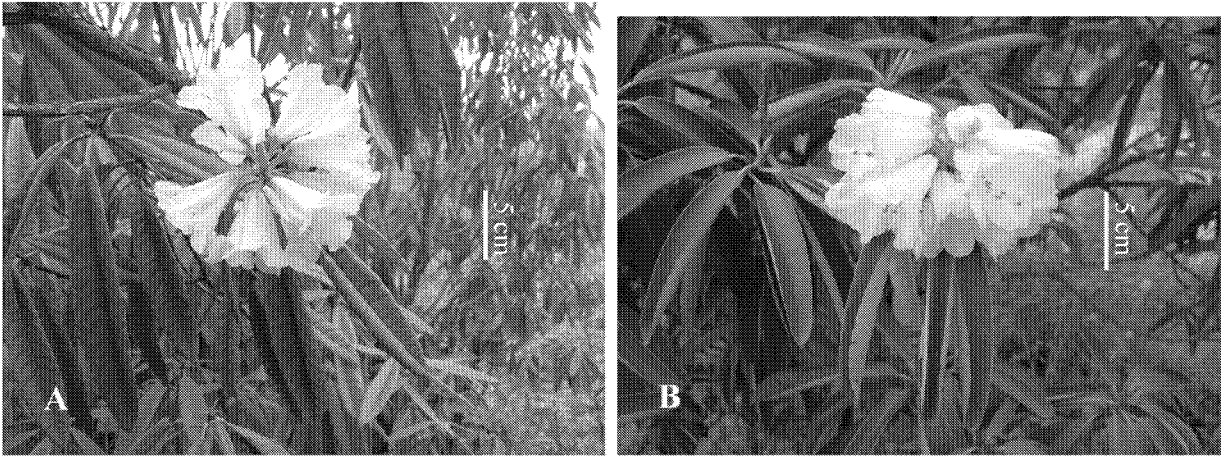


Fig. 2 Flowering branches of *Rhododendron eriobotryoides* and *R. jinboense*  
A. *R. eriobotryoides*; B. *R. jinboense*. (Photographed by Xiang CHEN)

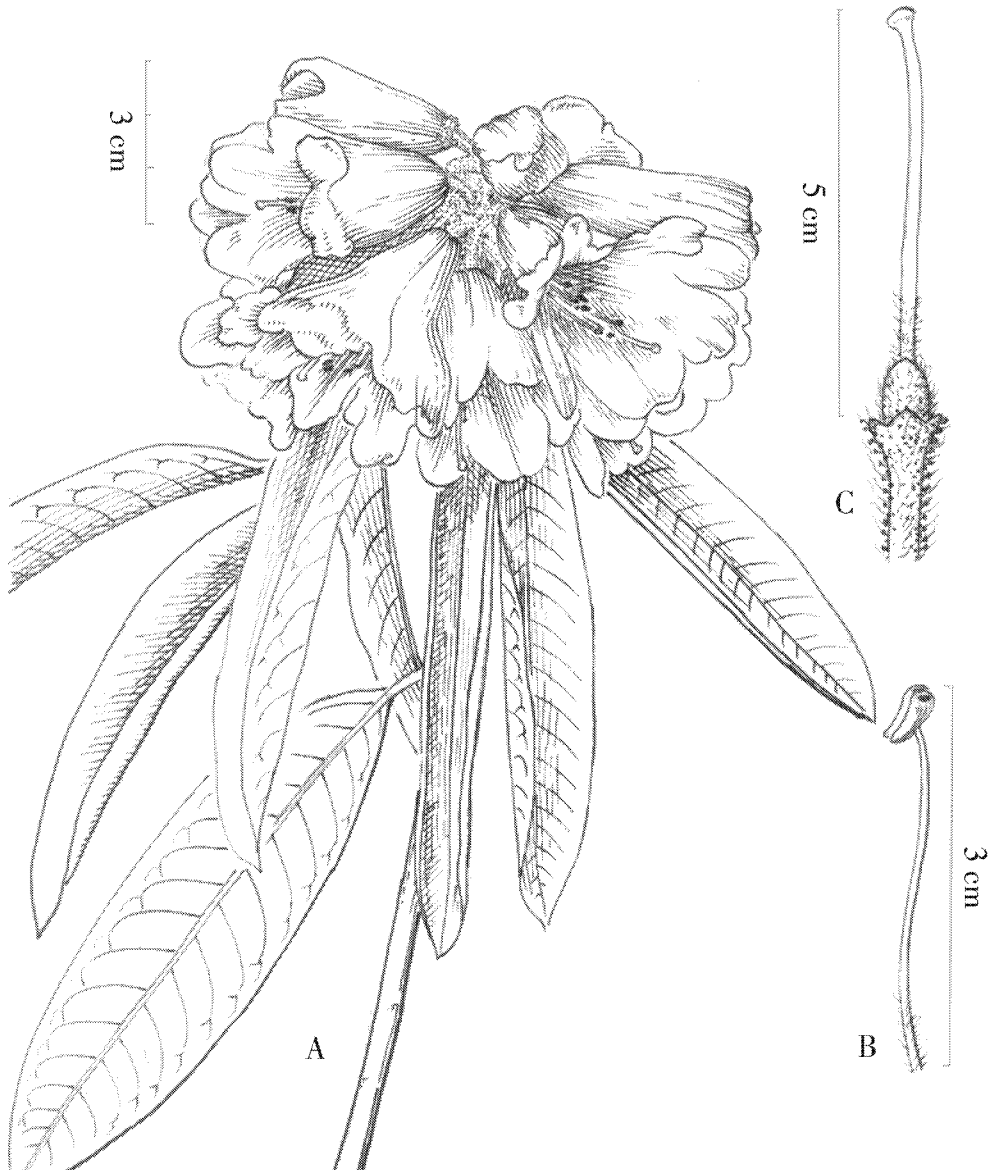


Fig. 3 *Rhododendron jinboense* Xiang Chen & X. Chen.

A. Flowering branch; B. Filament; C. Gynoecium. [Drawn by H. Xie from the holotype Xiang Chen 09040 (HGAS)].

**Etymology:** The species is named after its type locality, Jinpo, Baili Rhododendron Nature Reserve, Guizhou, China.

This species is allied to *R. brevinerve* Chun & W. P. Fang, but is distinguished mainly by having a oblong-elliptic and U-shaped leaf blade (vs. an elliptic-lanceolate or widely lanceolate and flat leaf blade), a 9~14-flowered inflorescence (vs. a 2~4-flowered inflorescence), a 5~5.5 cm long corolla (vs. a 2.5~4 cm long corolla), puberulent filaments (vs. glabrous filaments), and a densely tomentose ovary (vs. a densely glandular-hairy ovary).

The preliminary assessment of the conservation status for the species is Critically endangered, (CR), based on criterion D<sup>[14]</sup>, since there is just one population that includes five mature individuals found through the field observation. Habitat loss (agriculture) and human disturbance (recreation/tourism) are the current major threats to the species because it is distributed in a rural scenery area. Luckily, several new recruits were found under the mature ones.

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