

## A new species of *Gaultheria* L. (Ericaceae) from Arunachal Pradesh, India

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### Abstract

*Gaultheria kamengiana* Panda & Sanjappa (Ericaceae) is described as new species from the West Kameng district of Arunachal Pradesh in India. The new species is also provided with illustration and probable affinities.

**Key words:** *Gaultheria kamengiana*, West Kameng district, Arunachal Pradesh, India.

### INTRODUCTION

The genus *Gaultheria* L. consisting of about 134 species (Mabberley 2008) is distributed in India (Himalayas, North-eastern India and hill tops of South-western Ghats), Sri Lanka, South-western China, Northern Myanmar, Thailand, Laos, Northern Vietnam, Cambodia, Malaysia, Indonesia, America, Australia and New Zealand. 23 species are reported to occur in India (Panda & Sanjappa 2006) and are mainly distributed in Eastern Himalaya at altitudes ranging from (600 –) 1300 – 4800 m. Based on the size and apex of the leaves, shape and indumentum characters of the corolla, the position of bracteoles and the nature of the fruits, Middleton (1991) divided the genus into 10 sections, 2 subsections and 23 series. The Indian taxa represent 4 sections viz., *Chiogenopsis* D.J. Middleton, *Monoanthemona* D.J. Middleton, *Brossaeopsis* Airy Shaw and *Brossaea* (L.) D. J. Middleton and 5 series viz., *Trichophyllae* Airy Shaw, *Codonanthae* D.J. Middleton, *Dumicolae* Airy Shaw, *Nummularioideae* Airy Shaw and *Leucothoides* (Airy Shaw) D.J. Middleton.

As a result of revisionary work on the family Ericaceae in India under “Flora of India Project”, Botanical Survey of India (1999 – 2004), several field trips in the Eastern Himalayas and North-eastern India as well as visit to several Indian herbaria were done. During herbarium visit to ASSAM herbarium (in December 2002), an interesting specimen of *Gaultheria* L. was consulted. A critical study of this specimen revealed that this is new to the science and is described and illustrated here as a new species belongs to the series *Leucothoides* of the section *Brossaea*.

***Gaultheria kamengiana* Panda & Sanjappa, sp. nov.**

**Fig. 1; Plate 1.**

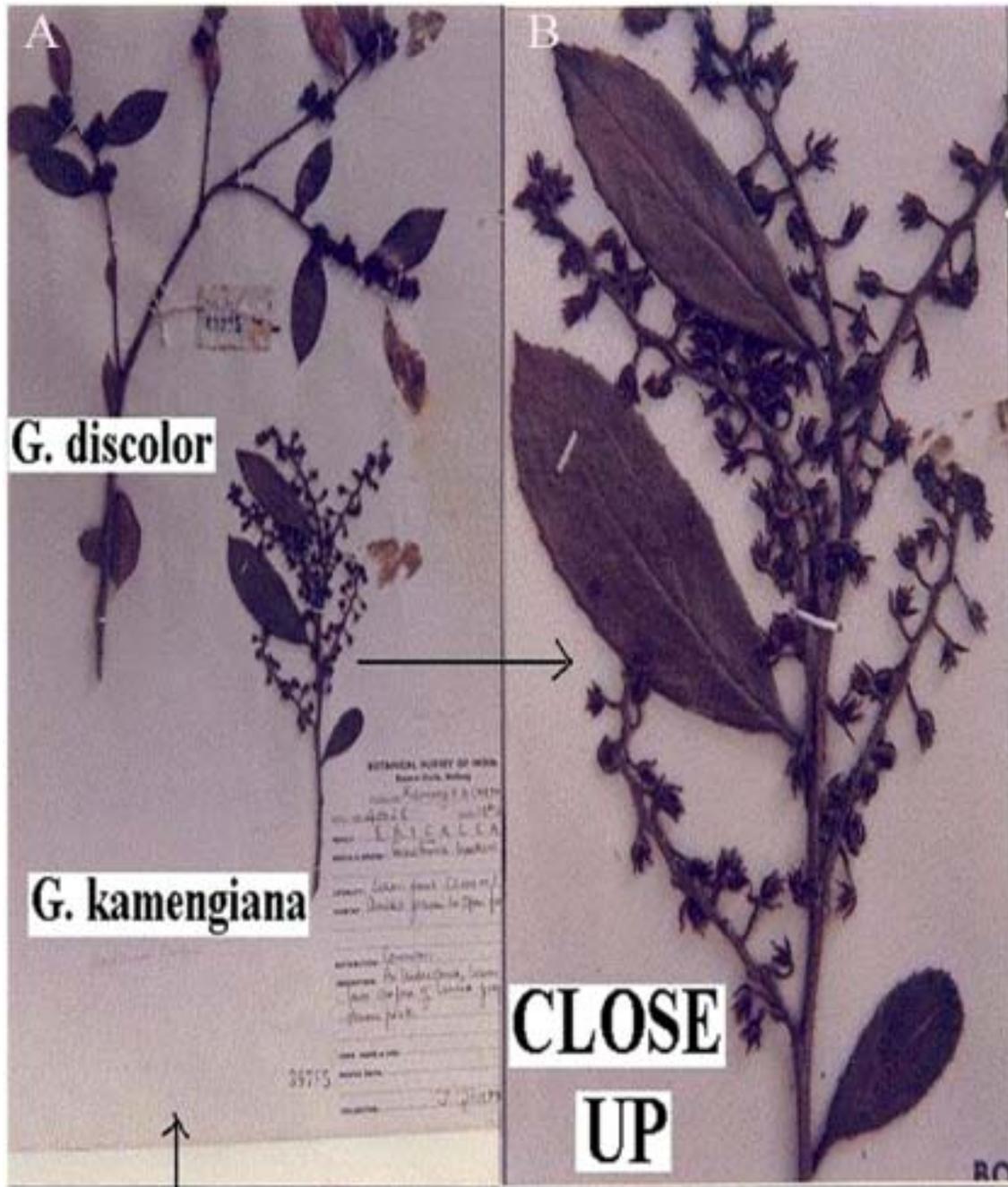
*Species nova* *Gaultheria discolor* Nutt. ex Hooker *valde affinis, sed foliis 10 – 18 mm latis, rhachidis longioribus (c. 60 mm longis), 17 – 22-floris, floribus laxis et pedicellis longis differt, et a G. straminea* R. C. Fang *differt rhachidis longioribus, pedicellis longis (4 – 6 mm) et calycibus glabris.*

**Typus:** India, Arunachal Pradesh, West Kameng district, Sehari forest, 2000 m, 15.09.1964, J. Joseph 40025 (bottom in “late flowering”), *pro parte* (holo. ASSAM).

Stout, erect shrub, 20 – 30 cm high. Stem and branches terete, sparsely rusty red hirsute. Leaves coriaceous, lamina elliptic-oblong, elliptic-lanceolate to rarely obovate, 25 – 55 × 10 – 18 mm, serrate at margin, narrowly cuneate at base, short acuminate to mucronate at apex, glabrous above, punctate beneath; venation brochidodromous with 2-pairs lateral veins; petioles stout, 3 – 5 mm long, glabrous. Racemes axillary, rachis c. 60 mm long, 17 – 22-flowered, puberulous. Flowers c. 11 mm long; pedicels 4 – 6 mm long, puberulous; bract 1, basal, broadly ovate, c. 4.5 × 2.5 mm, ciliate at margin, acute at apex, glabrous; bracteoles 2, opposite, subapical, elliptic, c. 3.5 × 1.5 mm, ciliate at margin,



**Fig. 1:** *Gaultheria kamengiana* Panda & Sanjappa sp. nov.  
 A. habit; B. flower; C- E. bracts; F - G. calyx lobes; H - J. bracteoles; K. corolla split open; I. corolla lobe; M - N. stamens; O. pistil; P. ovary (t.s.); Q. ovules. Scale bars: A = 1 cm; B - E, K, o = 2 mm; F - J, L, M, N, P = 1 mm (A - Q: drawn from J. Joseph 40025).



**Plate 1:** *Gaultheria kamengiana* Panda & Sanjappa: A. new species mounted with *G. discolor*; B. close-up part of new species.

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acute at apex, glabrous. Calyx lobes ovate-triangular, c.  $2.5 \times 1$  mm, ciliate at margin, acute at apex, glabrous. Corolla urceolate, pinkish, c. 4.5 mm long, glabrous outside, pilose inside, lobes ovate-oblong, c.  $1 \times 0.5$  mm. Stamens 10, c. 1.5 mm long, loosely epipetalous; filaments less than 1 mm long, slender, pilose, dilated at middle; anthers less than 1 mm long, each lobe with 2 minute apical awns. Pistil c. 3 mm long; ovary globose, c.  $1 \times 1$  mm, densely pilose, ovules numerous on axile placenta in each locule; disc minutely 10-dentate; style c. 2 mm long, slender, glabrous. Fruits not seen.

**Etymology:** This species is named after its type locality district.

**Flowering:** September.

**Habitat:** This species grows amidst grasses in open forest floor.

**Taxonomic Note:** *Gaultheria kamengiana* is closely related to *G. discolor* Nuttall ex Hooker, a Himalayan-Burmese species, from which it differs in having 10 – 18 mm broader leaf blades, c. 60 mm long racemes, 17 – 22-flowered, flowers not crowded and 4 – 6 mm long pedicels. By contrast, *G. discolor* showed 20 – 35 mm broader leaf blades, densely crowded short racemes (15 – 25 mm long), 6 – 9-flowered and comparatively short pedicels (2 – 3 mm long). *G. kamengiana* is also allied to *G. straminea* R. C. Fang, a Chinese species, but differs from it in having c. 60 mm long racemes, 17 – 22-flowered, 4 – 6 mm long pedicels and glabrous calyx. By contrast, *G. straminea* showed 15 – 35 mm long racemes, 10 – 12-flowered, short pedicels (1 – 2 mm long) and puberulous calyx.

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