

Liparis sanamalbarica (Malaxideae: Epidendroideae): Extended distribution to Karnataka, India

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ABSTRACT

Liparis sanamalbarica which has been reported as a new record to Karnataka, with the characters like epiphytic habitat, presence of a pseudobulb with network, crenate margin at the front lobe, 2 pairs of pollinia. This species is misidentified as *Liparis barbata* earlier, which is clarified in this manuscript. *Liparis sanamalbarica* has been collected from Devarmane hillock, Mudigere, Chikmagluru, Karnataka, India.

Keywords: Bilobed labellum, Calli, Conflict, Epiphytic orchid, *Liparis*, New record, Orchidaceae.

Introduction

Orchidaceae Juss. consist of 691 Accepted genera with 26500 species across worldwide (POWO, 2026). *Liparis* Rich. has 446 accepted species across globe. India is home for 1256 species of orchids [8, 12]. Flowering Plants of Western Ghats reported 14 *Liparis* species from different states of India [7]. Karnataka consist of 197 species of wild orchids under 67 genera [11]. Genus *Liparis* in Karnataka consist of eight species (*Liparis atropurpurea* Lindl., *Liparis biloba* Wight, *Liparis deflexa* Hook.f., *Liparis elliptica* Wight, *Liparis nervosa* (Thunb.) Lindl., *Liparis platyphylla* Ridl., *Liparis viridiflora* (Blume) Lindl., *Liparis wightiana* Thwaites) [10, 11].

During exploration near Devarmane hillock, Mudigere, Chikmagluru, Karnataka, we collected a *Liparis* species which was diagnosed with characters such as epiphytic habitat, presence of pseudo bulb, labellum bilobed with central notch and crenate front lobe, two calli, 2 pairs of pollinia. The above characters are not matching with species existing in Karnataka, India. Thus above species is identified as new record for Karnataka as *Liparis sanamalabarica* P. M. Salim.

Material & methods

Study area:

Chikkamagaluru is a district in the Indian state of Karnataka. Chikkamagaluru is where coffee was first cultivated in India. The mountains here which are a part of the Western Ghats, are the source of rivers like Tunga and Bhadra. Chikkamagaluru district also contains Mullayanagiri; which is the highest peak in Karnataka. It is also a tourist's paradise containing hill stations like Kemmanagundi and Kudremukh and waterfalls like Manikyadhara, Hebbe, and Kallathigiri. Chikkamagaluru district has a rich history as is seen in the Hoysala temple at Amrithapura. Wildlife enthusiasts would be interested in the Kudremukh National Park and Bhadra Wildlife Sanctuary present in this district.

Devaremane and Kalbairava temple is one of the scenic beauties in Mudigere taluk, with chain of hillocks including shola patches just adjacent to Charmdi Ghat [1; 2].

Collection, identification and herbarium preparation:

Field collections were made following standard ethical and herbarium protocols [9], ensuring minimal disturbance to natural populations. Vegetative material was carefully collected in zip-lock bags for safe transport to the laboratory. The herbarium specimen is pressed out after dissection and identification with the floras and monographs [6, 11, 12] and submitted in Herbarium of Karnatak Science College, Dharwad (HKSCD).

Results

Taxonomic treatment:

Liparis sanamalabarica P.M. Salim in Taiwan 62: 345 (2017). **Figure 01.**

Epiphytic or occasionally terrestrial herb, up to 13-15 cm tall, stem purple. Pseudobulb ovoid, with ridges, covered by membranous sheathing leaves at base. Roots slender, to 1 cm long. Leaves usually 1, rarely 2, blade ovate-elliptic, equal at base, 8 × 4 cm, plicate, acute, glossy, glabrous, green, margin entire, wavy, number of veins 7; petiole to 1 cm long. Inflorescence terminal, racemose, 6 to 9 cm long, bearing ten to fifteen green-marron reddish flowers, axis glabrous, ridged. Floral bracts linear-lanceolate, leafy, 4 mm long, apex acute, green, glabrous, 1-nerved. Dorsal sepal linear-lanceolate, strongly reflexed, 8 mm long, acute, reddish-marron, 3-veined. Lateral sepals lanceolate, spreading forwards below the apex of the labellum, 8 mm, acute, 3-veined, reddish-marron. Petals linear, strongly revolute, spreading and deflexed, 8 mm long, reddish-marron, 1-veined, acute. Labellum rhomboid, sides not recurved, 5-6 mm long, 4 mm wide, margins serrate and wavy at apex, creamy yellow; disc with 2 calli at base.

Column strongly incurved, 7 to 8 mm long, winged at apex. Pollinia four in two pairs and tinged at midlobe. Ovary pedicellate, 8 mm long, clavate, twisted at base. Fruit a capsule, 1 mm long and 5 mm wide, dark grey with ridges.

Flowering season: August-September.

Species Examined India, Karnataka, Chikmagalur, Mudigere, Devaramane hill station, Kaushik M. P. & Dr. Shreyas Betageri, 0412, 23-08-2026, HKSCD21601 (Figure 02).

Distribution in India: Kerala, Karnataka (Present new record)

Note: *Liparis sanamalabarica* P.M.Salim is misidentified as *Liparis barbata* Lindl. in flowersofindia website photographed from Mudigere, Karnataka (<https://www.flowersofindia.net/catalog/slides/Bearded%20Liparis.html>). *Liparis wrayi* Hook.f. as *Liparis barbata* Lindl. in Flora of Peninsular India portal (<https://indiaflora-ces.iisc.ac.in/FloraPeninsular/herbsheet.php?id=6763&cat=7>). *Liparis barbata* Lindl. from Devaramane hills, Mudigere, Chikmagalur, Karnataka on August 15 2015 (<https://efloraofindia.com/efi/liparis-barbata/>). *Liparis sanamalabarica* P.M. Salim, (Orchidaceae) which has been recorded as new species in 2017 from Wayanad District, Kattimattom Hills, N 11°29'30.2" E 76° 06' 11.7", altitude 1392 m, Sept 2011, P.M. Salim 0416 (holo: MSSRF!; iso: MSSRF!).

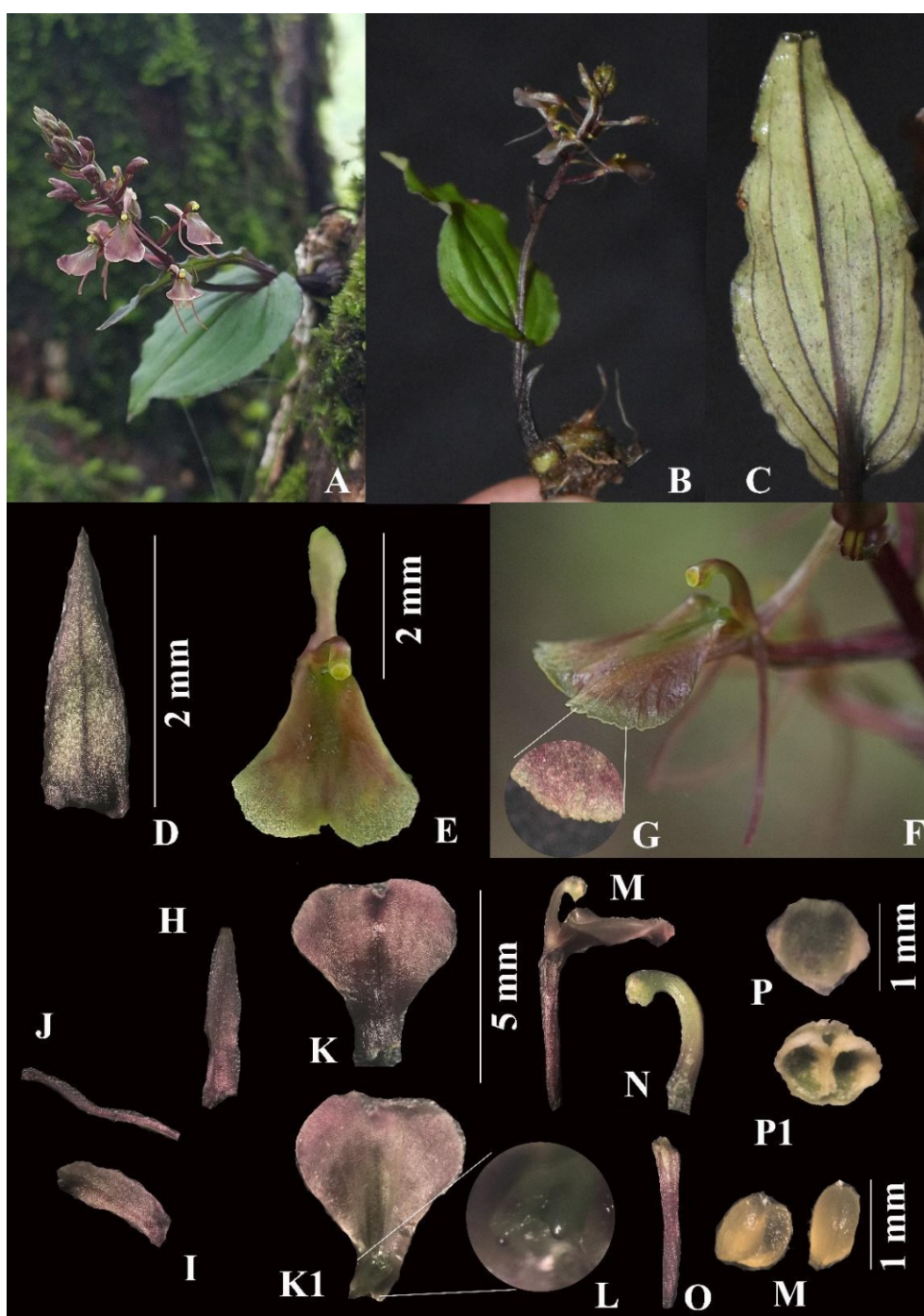


Figure 01. *Liparis sanamalabarica* A. Habit; B. Single individual; C. Ventral leaf; D. Bract; E. Front view of flower; F. Side view of flower; G. Crenate front lobe; H. Dorsal sepal; I. Lateral sepal; J. Petal; K. Ventral view of labellum; K1. Dorsal view of labellum; L. Calli; M. Column and labellum; N. Column; O. Ovary; P. Dorsal view of Anther cap; P1. Ventral view of Anther cap; M. Pollinia (Photography by Dr. Shreyas Betageri & Mr. Kaushik M. Pandeera)

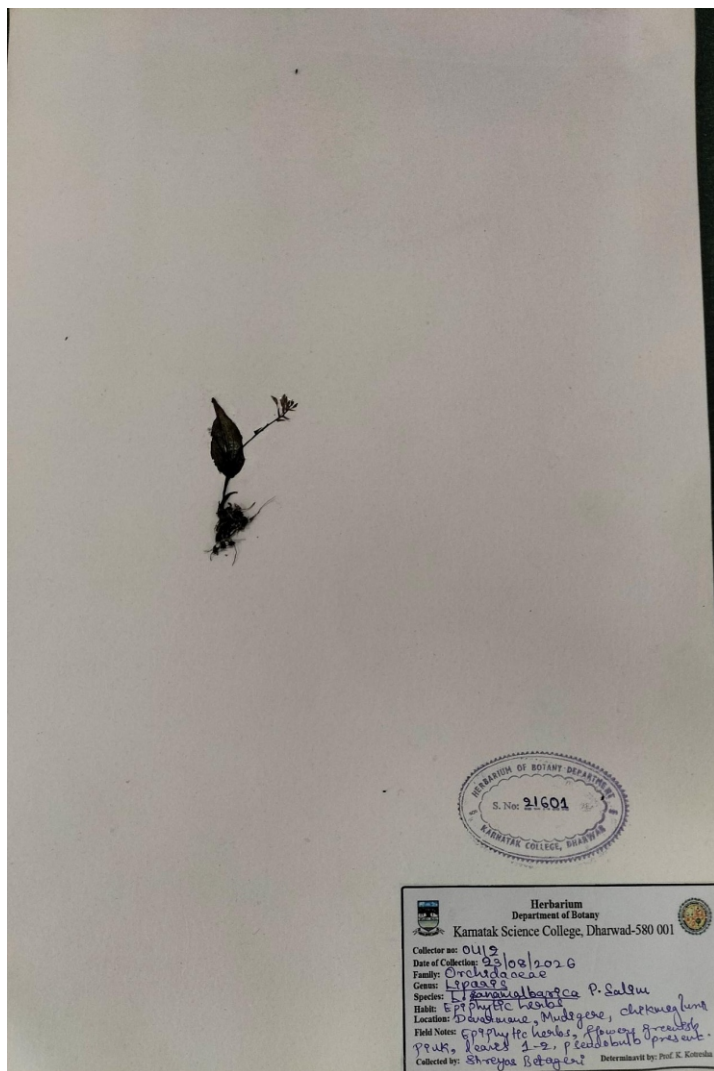


Figure 02. Herbarium specimen deposited at Karnatak Science College, Dharwad (HKSCD)

Key to species for *Liparis* genus in Karnataka:

1	Epiphytic	2
1	Terrestrial/ saprophytic	4
2	Bulb small, leaf with 3-5 prominent dark nerves	<i>L. sanamalbarica</i>
2	Bulb large	3
3	Bulb long, leaf linear-lanceolate with acute apex	<i>L. viridiflora</i>
3	Bulb flat angled, leaf broad ovate with acuminate apex	<i>L. elliptica</i>
4	Terrestrial	5
4	Saprophytic on dead wood log	<i>L. barbata</i>
5	Habit up to 15-30 cm including inflorescence	<i>L. odorata</i>
5	Habit less than 12 cm including inflorescence	6
6	Labellum bilobed	<i>L. biloba</i>
6	Labellum not bilobed	<i>L. wightiana</i>

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