**Schoenorchis manilaliana** M.Kumar & Sequiera (Orchidaceae): A new record for Orchidaceae of Tamil Nadu, India

C. Rajasekar¹, G. Aazhivaendhan², R. Rajendran¹, T. Senthil Kumar², & R. Kottaimuthu³

¹Department of Botany, Alagappa University, Karaikudi – 630 003, Tamil Nadu, India
²Department of Botany, Bharathidasan University, Tiruchirappalli – 620 024, Tamil Nadu, India
³Email: rkmlegumes@gmail.com

**Abstract**

*Schoenorchis manilaliana* M.Kumar & Sequiera collected during a field expedition to Megamalai Wildlife Sanctuary forms a new distributional record for the state of Tamil Nadu. The present collection is a first report from outside the type locality. A brief description, photo-plate and other details of this endemic orchid is presented here.

**Keywords**

Endemic, epiphyte, India, Western Ghats

**Introduction**

The genus *Schoenorchis* Reinw. ex Blume has about 28 species (1) in tropics and subtropics of Asia, Australia and islands of west Pacific with the highest diversity in continental Southeast Asia (2, 3). India is known to have 7 species, namely *S. fragrans* (C.S.P. Parish & Rchb.f.) Seidenf. & Smitinand, *S. gemmata* (Lindl.) J.J. Sm., *S. jerdoniana* (Wight) Garay, *S. manilaliana* M.Kumar & Sequiera, *S. minutiflora* (Ridl.) J.J. Sm., *S. nivea* (Lindl.) Schltr. and *S. smeenea* (Rchb.f.) Jalal, Jananthi & Schuit. (4). Of these, presently 3 species are reported from Tamil Nadu (5, 6).

During a recent field visit to Megamalai, Theni District, Southern Western Ghats, the authors collected few interesting epiphytic orchid specimens from the edges of evergreen forests. Critical studies with pertinent literature (7) revealed that they represent as *S. manilaliana* M.Kumar & Sequiera, an endemic orchid of Kerala, hitherto unknown from Tamil Nadu. Furthermore, the present collection is the first report of the species from outside the type locality and an addition to the Orchidaceae of Tamil Nadu. Hence, it is discussed here under with relevant details for its easy identification.

**Taxonomic treatment**

*Schoenorchis manilaliana* M.Kumar & Sequiera in Kew Bull. 55(1): 241. 2000. (Fig. 1).

Epiphytic herbs; stems 5–6.8 cm long, curved upwards, base with remains of old petiolar sheaths. Leaves simple, alternate, linear or linear-lanceolate, 2–3.8 × 0.1–0.4 cm, twisted, succulent, emarginated at apex. Racemes 5–6.5 cm long, leaf-opposed, 15–26–flowered; peduncle up to 2.5 cm long, sterile bracts 3–4, minute. Bracts ovate or triangular-ovate, up to 2 mm long, 1–nerved, margin scarios, folded inwards, acuminate at apex. Flowers white, ca 2 mm across. Dorsal sepal 1.6–2 × 0.5–0.8 mm, elliptic to oblong, obtuse, 1-nerved; lateral sepals ca 20 × 8 mm, obovate, faintly twisted,
keeled near the apex, 1–nerved. Petals white, ca 18 × 5 mm, oblong or obovate, twisted, 1–nerved; lip white, fiddle-shaped, up to 2.5 mm long, fleshy; lateral lobes ca 1 mm long, induplicate; midlobe ca 1 mm long, globose; anther yellowish, terminal; operculum 0.2–0.3 mm long, curved apically; pollinia unequal, stipe boat shaped; ovary inferior, pedicel 2–2.5 cm long, ovules attached with parietal placentia. Capsules obovoid, ca 3 mm long; seeds microscopic, numerous, dusty.

**Distribution**

INDIA: (Kerala & Tamil Nadu [present report]). Endemic.

**Specimens examined**

India. Tamil Nadu, Megamalai, 9° 41’ 53’’ N; 77° 24’ 03’’ E, 1421 m, 30 August 2021, C.Rajasekar & R.Rajendran 300 (Alagappa University Herbarium).

**Ecology**

It is very rarely seen at the edges of evergreen forests at an altitudinal range between 1200–1450 m.

**Note**

According to Kumar and Sequiera (7), *S. manilaliana* closely resembles *S. nivea*, but easily distinguishable by its leaves twisted with acute apex (vs. leaves not twisted with notched apex in *S. nivea*), racemes simple, up to 7 cm long (vs. racemes in much branched panicles, 7–11 cm long in *S. nivea*) and bracts smooth (vs. bracts papillate in *S. nivea*).

**Acknowledgements**

The author (TSK) acknowledges the DST-SERB, Govt. of India for providing financial assistance through Project (Sanction Number CRG/2019/000367). Authors are grateful to the Tamil Nadu Forest Department for granting permission to carry out this research. We also grateful to Dr. Pankaj Kumar, Kadoorie Farm and Botanic Garden, Hong Kong for help in identification.

**Authors contributions**

CR, GA and RR carried out the field survey and herbarium preparation. RK and CR identified and authenticated the collection. All authors read and approved the final manuscript.

**Compliance with ethical standards**

**Conflict of interest**: Authors do not have any conflict of interests to declare.

**Ethical issues**: None.

**References**


---

Fig. 1. *Schoenorchis manilaliana*. a- habit; b- root; c- node; d-f leaves; g- inflorescence; h- bract; i- flower bud; j- flower side view; k- flower front view; l- sepals and petals; m- fruit.