

***Piper zeylanicum* Miq. (Piperaceae) – endemic species new record for India**

V. S. Ramachandran*, A. Joney John, T. Baluprakash, C. Udhayavani

Taxonomic and Floristic Laboratory, Department of Botany, Bharathiar University,
Coimbatore, Tamil Nadu, India

*E-mail address: vsrbotany@gmail.com

ABSTRACT

Piper zeylanicum Miq. (Piperaceae) an endemic species of Sri Lanka is reported and described and illustrated as a new record for India from Nilgiri District of Tamil Nadu.

Keywords: endemic species; India; Nilgiris; *Piper zeylanicum*; Sri Lanka

1. INTRODUCTION

Piper L. (Piperaceae) comprises *c.* 2000 species, and distributed chiefly in the tropical regions of the world (Mabberley, 2008). Hooker (1886) had reported 45 species from erstwhile British India. Cooke (1967) reported 4 species and Gamble (1921) reported 14 species from South India. Henry *et al.* (1987) reported 19 species of *Piper* from Tamil Nadu. Sharma *et al.* (1977) reported 9 species from Nilgiris alone. Similarly, Sasidharan (2004) had reported 16 species from Kerala. While survey on the documentation and cataloguing and domestication of wild ornamental potential plants from Nilgiris funded by CSIR, the authors collected the *Piper* species from Kengarai forest of Kotagiri range. After a thorough scrutiny of existing literature, the specimen has been identified and confirmed as *Piper zeylanicum* L. (Piperaceae). This species is allied to *Piper hymenophyllum* and it can be differentiated from bracts not or scarcely peltate, peduncles longer than the petiole whereas the bracts peltate, peduncles shorter than the petiole.

2. PLANT DESCRIPTION

Piper zeylanicum Miq., London J. Bot. 4:436.1845; C.DC., Prodr. 16(1):366.1869; C.DC. Candollea 1:215.1923; Hook.f., Fl. Brit. India 5:91.1886; Trimen, Handb. Fl. Ceylon 3:420.1895; Dassanayake in Dassanayake & Fosberg, Rev. Handb. Fl. Ceylon 6:274-288.1987. *Piper arcuatum* “Blume” Thw., Enum. Pl. Zeyl. 293.1861. not *P. arcuatum* Blume in Verh. Butav. Genootsch. Kunstern. 11:180.1826; C.DC., in DC., Prodr. 16(1):360.1869. *Piper thwaitesii* C.DC. in DC., Prodr. 16(1):357.1869; C.DC., Candollea 1:202.1923; Trimen, Fl. Ceylon 3:426.1895. *Piper caninum* Blume var? *thwaitesii* (C.DC.) Hook.f., Fl. Brit. India 5:82.1886. Figure 1.



Figure 1. A flowering branch of *Piper zeylanicum* Miq. (Piperaceae).

A terrestrial climber; stem glabrous, much swollen at the nodes, internode 1.7 – 11.5 cm long. Leaves petiolate, 1 cm long, lamina 6 – 12 cm long, 2-7 cm wide, ovate, base obtuse, rounded or shallowly cordate at base, acute or acuminate at apex, coriaceous, glabrous on both sides, 2 pairs of arcuate veins arising from the base; cross veins rather straight, parallel, closely prominent beneath in dried leaves.

Peduncle 0.9-2.5 cm, in fruit upto 2 cm long, glabrous, shorter than the petiole, leaf opposed. Inflorescence spike, 4-6 cm long, with hairy axis, twisted in fruit. Bracts peltate, about as long as wide, sessile, margin membranous, free. Flower crowded, diaceous. Stamens 2, stylules 3-4, 0.7-0.9 mm across. Berries distinct, glabrous, obovoid, 4-5mm long, fleshy, orange at maturity.

Fl. & Fr.: January – April

Distribution: Sri Lanka and India (Endemic to Sri Lanka and Nilgiris)

Ecology: Rare in sholas above 1600 m.

Specimen examined: INDIA, TAMIL NADU, NILGIRIS, V.S.Ramachandran, Kengari, 1630 m MSL, 5452, BUH.

Notes: This species was reported from Sri Lanka and stated as endemic to moist upland forests of Ceylon (Dassanayake, 1987).

Acknowledgements

The authors are thankful to CSIR, New Delhi for the financial assistance by way of sanctioning a Major Research Project. Also thanks to Dr.V.Narmatha Bai, Professor and Head, Department of Botany, Bharathiar University, Coimbatore for providing necessary facilities to carry out the research work in the department.

References

- [1] T. Cooke, Flora of the presidency of Bombay, Bishen Singh Mahendra Pal, Dehra Dun 2 (1906) 18-20.
- [2] M.D. Dassanayake, *In Dassanayake M.D., Fosberg F.R. A revised handbook to the Flora of Ceylon*. Vol. VI. Oxford & IBH Publishing C. Pvt. Ltd., New Delhi (1987) 274-288.
- [3] J. S. Gamble, Flora of the Presidency of Madras. Adlard & Sons Ltd., London (1921) 1203-1208.
- [4] A.N. Henry, Kumari G.R., Chithra V. Flora of Tamil Nadu, Botanical Survey of India, Coimbatore 2 (1987) 203-205.
- [5] J.D. Hooker, *Piperaceae*. In: The Flora of British India, L. Reeve & co., London 5. (1886) 78-99.

-
- [6] J.D. Mabberley, Mabberley's Plant-Book: A portable dictionary of plants, their classification and uses. Cambridge University Press, Cambridge (2008) + 560pp.
- [7] N. Sasidharan, Biodiversity documentation of Kerala. Part 6. Flowering Plants. KFRI Handbook. No. 17. Kerala Forest Research Institute, Thrissur (2004) 391-392.
- [8] B.D. Sharma, Shetty B.V., Vajravelu E., Kumari G.R., Vivekananthan K., Chandrabose M., Swaminathan M.S., Chandrasekaran R., Subba Rao G.V., Ellis J.L., Rathakrishnan N.C., Karthikeyan, S. Chandrasekaran V., Srinivasan S.R., *Biol. Mem.* 2(1&2) (1977) 121.

(Received 16 September 2014; accepted 25 September 2014)