

***Pothos tirunelveliensis* (Araceae): A new species from the Southern Western Ghats of Tamil Nadu, India**

Sasikala K. and M. Reema Kumari<sup>1</sup>

Mahatma Gandhi Govt. Arts College, Mahe - 673 311, U.T. of Puducherry, India.

<sup>1</sup>Maharani Lakshmi Ammani College for Women, Bengaluru, India.

drsasikalabot@gmail.com

**ABSTRACT**

*Pothos tirunelveliensis* Sasikala & Reema Kumari, a new species from Nagapothigai hills, Tirunelveli district, Tamil Nadu is described and illustrated. The species is closely allied to *P. crassipedunculatus* Sivad. & N. Mohanan, but differs in having hexagonal pistil without annular ridges and subglobose berries.

**KEY WORDS:** Araceae, new species, *Pothos*, Southern Western Ghats, Tamil Nadu.

**INTRODUCTION**

The genus *Pothos* L. is an evergreen epiphytic climber represented by ca 75 species in the tropical and subtropical regions of Asia, Australia, Madagascar and Polynesia (Mayo *et al.*, 1987; Heng, Li & Boyce, 2010) and 9 species and 2 varieties in India (Karthikeyan *et al.*, 1989). Of these *P. scandens* L. is widely represented throughout, four species namely *P. armatus* C. Fischer, *P. crassipedunculatus* Sivad. & N. Mohanan, *P. keralensis* Pandurangan & V.J. Nair and *P. thomsonianus* Schott are endemic to Western Ghats of Tamil Nadu and Kerala. *P. roxburghii* de Vriese and *P. vriesianus* Schott are distributed in the NE. India, Bangladesh and Myanmar. *P. macrocephalous* Scort. ex Hook.f. in the Andaman & Nicobar Islands and Malay Peninsula and *P. cathcartii* Schott in the E. & NE. India, Bangladesh, Bhutan, Myanmar, Nepal and W. China. The species collected from Nagapothigai hills, Tirunelveli district from Tamil Nadu is found to be closely allied to *Pothos crassipedunculatus*. On subsequent comparison with literature and herbarium specimens it turned out to be a new species which is described and illustrated.

***Pothos tirunelveliensis*** Sasikala & Reema Kumari, *sp. nov.* (**Fig. 1**) *Pothos tirunelveliensis* *sp. nov.* is allied to *P. crassipedunculatus* Sivad. & N. Mohanan but differs from it in the absence of whip like flagella, spathe with acuminate apex, pistil hexagonal without annular ridges and berries not angled.

**Typus:** INDIA, Tamil Nadu, Tirunelveli district, way to Nagapothigai hills, ca 800 m, 2.4.1991, R. Gopalan

96210, (Holotypus: MH; Isotypus: MH). Evergreen climber, without whip-like flagella at the ends of branches. Leaves simple, alternate; blade 6.5 - 15 x 1.8 - 4.6 cm, elliptic, oblique, cuneate at base, slightly sinuate along margins with primary submarginal vein and a secondary continuous intramarginal vein formed by the union of parallel and closely arranged primary vein, impressed above, prominent below, acuminate and shortly apiculate at apex, slightly coriaceous, glabrous, dark green; midvein prominent beneath, channeled above; petioles 0.5 - 1.5 cm long, sheathing at base, up to 3 mm long, dorsally channeled. Inflorescence usually arises from below the petiole. Peduncle 2.3 - 4 cm long. Cataphylls 1 - 3, basal rounded one of 0.3 - 0.5 cm long, upper lanceolate ones of 0.5 - 2.2 cm long, apiculate. Spathe 1.7 - 2 x 0.7 - 0.9 cm, erect, ovate, cymbiform, slightly sinuate along margins, acuminate, smooth, veins on the dorsal surface running towards the tip parallelly, overlapped at base, constricted at the junction between the spathe and peduncle. Spadix ca 1.5 x 0.3 cm, sessile, subcylindric, gradually tapering towards the apex. Flowers small, bisexual, compactly arranged, trimerous, greenish white, ca 1 mm across, Tepals 6, 1 - 1.1 x 0.5 - 1 mm, fleshy, flat, triangular above, pointed at the tip, vaulted, membranous on the sides. Stamens 6, 0.8 - 1.1 x 0.5 - 0.8 mm, antipetalous; filaments 0.7 - 1 x 0.5 - 0.7 mm, flat, longer than broad, spatula like, membranous below; anthers globose, ca 0.1 mm, 4-lobed, basifixed, extrose.

Pistil 1 - 1.5 x 0.8 - 1mm, hexagonal, without annular ridges; ovary 3-locular with one ovule in each; locules filled with mucilage; stigma sessile, neither convex nor with a tuft of papillae at the top. Berries subglobose, 1.1 - 3 x 1 - 2 mm, not angled.

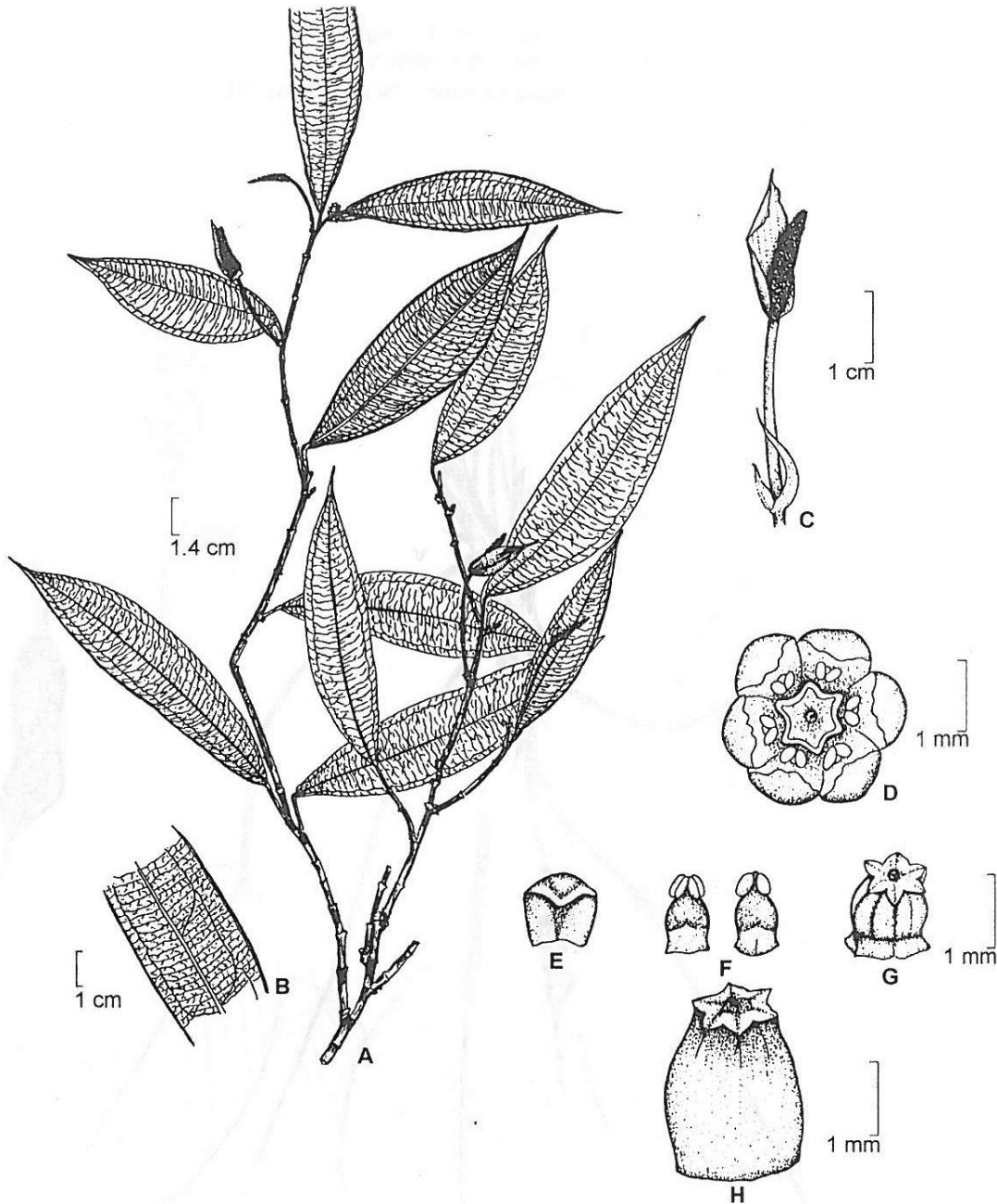
**Local name:** Tam.: *Parai-kodi*.

**Habitat:** In evergreen forest, not common.

**Phenology:** Flowering & Fruiting: April.

**Etymology:** The specific epithet is based after the type locality.

This species is closely allied to *Pothos crassipedunculatus* Sivad. & N. Mohanan. The difference between the two species is given in Table - 1.



**Fig.1. *Pothos tirunelveliensis*. Sasikala & Reema Kumari, *sp. nov.***

A. A twig B. A portion of leaf blade showing venation C. Inflorescence D. A flower spread open E. Tepal F. Stamen - dorsal & ventral view G. Pistil H. Berry

**Table 1: A comparison between *Pothos crassipedunculatus* and *P. tirunelveliensi* sp. nov.**

S.No.	Characters	<i>Pothos crassipedunculatus</i> Sivad. & N. Mohanan	<i>Pothos tirunelveliensi</i> sp. nov.
1	Flagella	Present at the ends of branches	Absent
2	Cataphylls	3 - 4	1 - 3
3	Inflorescence	Usually arises on short lateral shoots	arises from below the petiole
3	Spathe	ca 2.5 x 1.5 cm, acute and apiculate at apex	1.7 - 2 x 0.5 - 0.9 cm, acuminate at apex
4	Filament	ca 0.3 x 0.6 mm, fleshy, broader than long	ca 0.7 - 1 x 0.5 - 0.7 mm, not fleshy, longer than broad, spatula-like, colorless below
5	Pistil	truncate, ca 0.5 - 0.6 mm across, with an annular ridge	hexagonal, ca 0.8 - 1.0 mm across, without annular ridges
6	Stigma	Convex with a tuft of papillae at the centre	Neither convex nor with a tuft of papillae at centre
7	Berries	pyriform, 4 - 6-angled, ca 5 x 3 mm	subglobose, not angled, ca 3 x 2 mm

**ACKNOWLEDGEMENT**

The authors thank the Addl. Director, BSI, Southern Regional Centre (SRC), Coimbatore, for permitting to consult the herbarium and library; Dr. V.J. Nair, Ex-Emeritus Scientist, BSI, SRC, Coimbatore, for valuable suggestions; Dr. R. Gopalan, Former Scientist, BSI,

SRC, Coimbatore, for placing the material at our disposal. Prof. Li Heng, Kunming Institute of Botany, Chinese Academy of Sciences, China, for confirming the novelty of species and valuable comments. Mr. Suresh Artist, BSI, SRC, Coimbatore, for the illustration.

**LITERATURE CITED**

**Heng Li and Boyce PC** *Pothos* In: **Wu, Z & Raven PH, 2010.** *Flora of China*. **23**: 6-8. Missouri Botanical Garden Press. St. Louis.

**Karthikeyan S, Jain SK, Nayar MP and Sanjappa M, 1989.** *Florae Indicae Enumeratio : Monocotyledonae*. Calcutta.

**Mayo SK, Bogner J and Boyce PC, 1997.** *The Genera of Araceae*. Royal Botanic Gardens. Kew.

**How to Cite this Article:**

**Sasikala K and M Reema Kumari, 2013.** *Pothos tirunelveliensi* (Araceae): A new species from the Southern Western Ghats of Tamil Nadu, India. *Sci. Res. Rept.*, **3(2)**:152-154.