

***Ipomoea triloba* (Convolvulaceae) - A New Record of a Naturalized Taxon for Western Ghats of Tamil Nadu**

Ariyan Sarvalingam, Arumugam Rajendran, Ramamoorthy Sivalingam and M. Kasipandi

Department of Botany, Bharathiar University, Coimbatore - 641046, Tamil Nadu, India

Abstract: *Ipomoea triloba* L. (Convolvulaceae) is newly recorded from Southern Western Ghats of Tamil Nadu. A detailed description with images and relevant notes are provided.

Key words: Convolvulaceae • Climber • *Ipomoea* • New record • Tamil Nadu • Western Ghats

INTRODUCTION

The genus *Ipomoea* L. comprises the largest number of species within the family Convolvulaceae (Morning glory) which are widely cultivated as ornamentals because of their showy and beautiful flowers. Throughout the world; *Ipomoea* is usually estimated to contain more than 600 species in which over half of them are concentrated in the Americas and Asian countries [1]. In India, the genus is represented by c. 60 species [2,3,4]. subsequently *Ipomoea mombassana* Vatke [5]; *I. parasitica* (Kunth) G.Don [6]; *I. ochracea* (Lindl.) G.Don [7]; *Ipomoea tenuipes* Verdc. [8] and *Ipomea muelleri* Benth. [9], have been added to Indian flora, bringing the total number into c. 65 species in India. Then, the state of Tamil Nadu the genus *Ipomea* is represented by c. 33 species [10], subsequently *Ipomea muelleri* Benth., have been added to Flora of Tamil Nadu, bringing the total number in to c. 34 species. During the floristic exploration in the Anamalai hills and Anaikatty hills of Southern Western Ghats, we came across an interesting specimen of *Ipomoea*. On critical studies with pertinent literature it is turned out to be *Ipomoea triloba* L. Perusal of literature revealed that this species earlier known to Gujarat, Kerala, Karnataka, Maharashtra, Rajasthan, Uttar Pradesh and West Bengal of India [11] has neither been collected nor reported from Tamil Nadu State so far. Hence the present collection is a first authentic collection in recent years and forms a new distributional record for Tamil Nadu.

The present communication includes a detailed description with illustration of this naturalized species to facilitate its further collection and easy identification. The

voucher specimen has been deposited in the Bharathiar University Herbarium (BH), Coimbatore-641 046.

Description: *Ipomoea triloba* L. Sp. Pl.161. 1753; Ooststroom, Fl. Males. Ser, 1, 4: 468. 1953; Fernandes *et al.*, in J. Bombay nat. Hist. Soc. 52: 661 - 663.1954; Baker & Bakhuizen, Fl. Java 2: 494. 1965; Chandrabose *et al.*, in Ind. J. Fores. 23-24. 1976; Fosberg & Sachet in Smithsonian Contr. Bot. No. 36: 24. 1977; Magesh *et al.*, in *ZOO's PRINT*, 5, 24. 2012.

Slender twining, rarely repand annual, upto 3 m long, leaves petiolate, petiole 3-8 cm long, lamina broadly ovate or cordate, often 3-lobed, 2.5 – 8.2× 2-4-7 cm, apex acuminate, deeply cordate at base, 7 -9 ribbed; margin entire or coarsely dentate; flowers 1- few flowered, pedunculate, umbellate cymes; peduncles up to 4 cm long, thickened towards apex, more or less hirsute; bract 2mm long, linear - lanceolate. sepals ovate, lanceolate, acute, pubescent; corolla funnel-shaped, ca 2cm long, 5-lobed, 5-plaited, lobes acute; stamens 5, filaments hairy at base; ovary 2-celled, hairsute, stigma globose, bilobed. Capsule ca 8 mm across, globose, bristly hairy, with persistent sepals, 4-seeded; seeds 3.5 × 2.5 mm, black. (Figs. 1 and 2).

Flowering and Fruiting: October – January.

Distribution: INDIA: (Gujarat, Kerala, Karnataka, Maharashtra, Rajasthan, Uttar Pradesh and West Bengal), Argentina, Bolivia, Brazil, Paraguay and Uruguay.

Habitat: A common twiner along hedges of the moist evergreen and deciduous forests. The species can be easily recognized by its setose sepals and hairy capsules.



Fig. 1: *Ipomoea triloba* L., A. Habit with flower B. Habit fruits

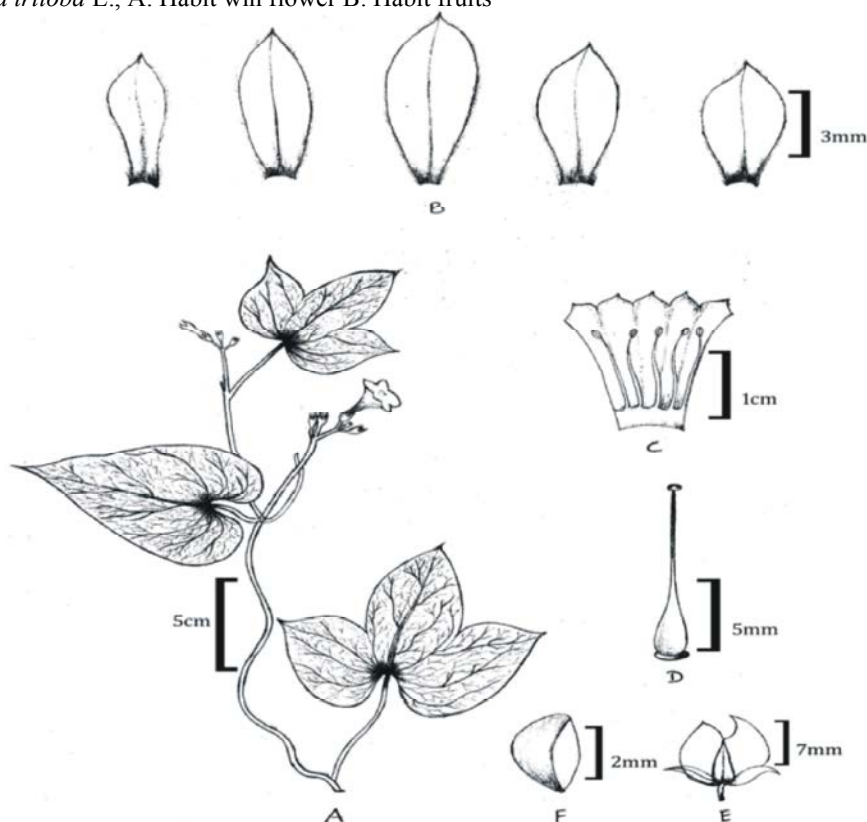


Fig. 2: *Ipomoea triloba* L., A. A twig, B. Sepals, C. Corolla split opened, D. Pistil, E. Capsule with persistent sepals, F. Seed

Specimens Examined: India: Tamil Nadu, Coimbatore District, Anamalai Tiger Reserve and Annaikatty hills, 12 November 2013, Sarvalingam, Rajendran & Sivalingam, 006237 (BH). Kerala: Quilon District, Pilapalli to Chalakayam, 27 November 1976, Chandrabose, 49217 (MH).

ACKNOWLEDGEMENTS

The authors are grateful to the Professor & Head, Department of Botany, Bharathiar University, Coimbatore. The first author is thankful to S. Gurusamy, K. Kiruthika, Lavanya and M. Sulaiman for involved in the plant collection trip.

REFERENCES

1. Judd, S.W., S.C.A. Campbell, E. Kellogg, F.P. Stevens and J.M. Donoghue, 2002. *Plant Systematics: A Phylogenetic Approach*. 2nd ed. Massachusettes, USA: Sinauer Associates, Inc.
2. Santapau, H. and A.N. Henry, 1973. *A Dictionary of the Flowering Plants in India*. Council of Scientific & Industrial Research, New Delhi. pp: 83.
3. Bhellum, B.L. and Ranimagotra, 2007. Addition to the flora of Jammu and Kashmie state- New reports. *J. Phytol. Res.*, 20(2): 243-245. (www.connectjournals.com).
4. Vinod, B., V.B. Shimpale, P.R. Kshirsagar and N.V. Pawar, 2012. *Ipomoea ochracea* (Convolvulaceae)- A new record for India. *Rheedia*, 22(2): 99-102.
5. Biju, S.D., P. Matthew and V.M. Kumar, 1998. *Ipomoea bombassana* Vatke (Convolvulaceae) - A new record for India. *J. Econ. Tax. Bot.*, 22(2): 471-473.
6. Biju, S.D., 2002. *Ipomoea parasitica* (Kunth) G. Don (Convolvulaceae): A new record for India. *Rheedia*, 12 (1): 77-79.
7. Shimpale, V.B., Kshirsagar, P.R. and N.V. Pawar, 2012. *Ipomoea ochracea* (Convolvulaceae) - A new record for India. *Rheedia*, 22(2): 99-102.
8. Vinod, B., M. Shimpale, A. Kare, D.K. Londhe and A.S. Bhuktar, 2014. On the occurrence of *Ipomoea tenuipes* (Convolvulaceae) in India. *Rheedia*, 24(2): 117-119.
9. Sarvalingam Ariyan, Rajendran Arumugam, Sivalingam Ramamoorthy and Jayanthi Palanisamy, 2014. *Ipomoea Muelleri* Benth. (Convolvulaceae) - A new record for Asian Continent. *Jordan Journal of Biological Sciences*, 7(4): 299-300.
10. Henry, N.G., R. Kumari and V. Chitra, 1987. *Flora of Tamil Nadu (Anal.)* 2: 105.
11. Magesh, C.R., P. Lakshminarasimhan and P. Venu, 2012. New plant records for Jharkhand. *ZOO's PRINT*, (5) 24.