

Persicaria limbata (Meisn.) H. Hara (Polygonaceae): An addition to flora of Allahabad District, Uttar Pradesh

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Abstract-*Persicaria limbata* (Meisn.) H. Hara of Family Polygonaceae is a new addition to the flora of Allahabad, Prayagraj district of Uttar Pradesh. The present paper deals with its detailed description, updated citation, phenology, habit, distribution and photographs.

Key words: Persicaria limbata (Meisn.) H. Hara, Polygonaceae, Flora, Allahabad district, Uttar Pradesh.

INTRODUCTION

Family polygonaceae have been explored extensively in Uttar Pradesh. This family commonly known as knotweed family or smartweed-buckwheat family. The family comprises about 1200 species of 56 genera distributed globally. Flora of British India¹ published with 96 species of 7 genera. The flora of upper gangetic plain includes 19 species of 2 genera² and supplement to Duthie's flora of upper gangatic plane³ has been published 9 species of single genera. In Family Polygonaceae in India⁴ have revealed the occurrence of 121 species and 29 varieties belonging to 12 genera. Flora of Uttar Pradesh⁵ is represented by 25 species of 6 genera and flora of Allahabad⁶ by 6 species of 3 genera. The specimen has been collected from Iradatganj Ghurpur Prayagraj (U.P.). Prayagraj district is located between 24°472 & 25°472 N latitude and 81009 & 820212 E longitude. It is identified as Persicaria limbata (Meisn) H. Hara and found to be new record of Flora of Allahabad (Prayagraj) district U.P.

MATERIALS & METHODS

Several field trips were organised for the study of family Polygonaceae in district Prayagraj of Uttar Pradesh. The specimens were identified with the help of various Flora⁷ and the e-Flora of India. Localities and other necessary field information were recorded in field diary. Specimens are recorded with their name, place, date and made herbarium by standard methodology.⁸ These Herbarium specimens were deposited at Duthie Herbarium, Department of Botany, University of Allahabad, Prayagraj.

Persicaria limbata (Meisn.) H. Hara, Fl. E. Himalaya: 71. 1966. *Polygonum limbatum* Meisn. in DC., Prodr. 14(1): 123. 1856; Hook. f., Fl. Brit. India 5:30.1886; Duthie, Fl. Upper Gangetic plain 3(1): 34. 1915.

An erect or procumbent annual herb, stems reddishbrown and green in young stage, up to 2 m or more long, sometimes rooting at the lower nodes, longitudinally striate, hollow in the lower part. Leaves $8-16 \times 0.2-1.7$ (3.5) cm, linear-lanceolate, acute and apiculate at the apex, narrowed to the base. Ochrea brownish, 1-1.5 cm long, glabrous, membranous, with a spreading or recurved, herbaceous, 1-7 mm long limb, ciliate at the apex and hairy outside. Flowers pedicellate, in fascicles of 2–3. Peduncles up to

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8-12 cm long, hairy; bracts hairy or glabrous, with or without a ciliate margin. Perianth white-pink, pink or white, 4-5 mm long, 5-lobed, lobes 2.5-3 mm long. Stamens 7; filaments 2–2.5 mm long, filiform; anthers pink, 0.4×0.2 mm. Ovary 1.5×1.5 mm, compressed; styles 2, 1–2 mm long, united for half their length. Stigma bifid. Nut dark red-brown to black, shiny, smooth, $2.5-3 \times 2.5-3$ mm, convex, the persistent style base forming a beak.

Ecology: Growing in moist places, often in pond.

- Flowering and fruiting: May to November Ghurpur, Prayagraj, Deepak Khare: 33204 (DUTHIE)
- Type: Syntype from Senegal and Nile Delta
- **Distribution:** Tropical Africa, South Africa, Egypt and India.
- In India: Bihar, Karnataka, Uttarakhand, Uttar Pradesh, West Bengal, Madhya Pradesh.
- Specimen examined: Jaunpur, N.P.Singh & C.L. Malhotra: 19504 (BSD); Kannauj, B.K. Sinha: 52145 (BSA); Lucknow, J.G. Srivastava: 46981(LWG); Saharanpur, Som Dev: 3048(BSD)

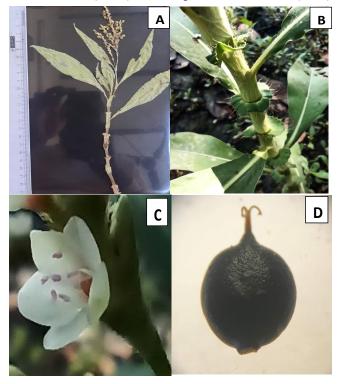


Plate: *Persicaria limbata* (Meisn.) H. Hara: A-Whole plant, B- Ochrea, C- Stamens, D-Nut with style and stigma

RESULT & DISCUSSION

During identification process recured scabrid ciliated limb are found which is characteristic feature of Persicaria limbata. Biconvex nuts are found. This character is mentioned in Flora of Uttar Pradesh and Flora of Madjya Pradesh.

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REFERENCES

- 1. Hooker J. D. 1886. Polygonaceae. In J.D. Hooker *The Flora of British India* Vol. 5. L. Reeve & co. London.
- Duthie J. F. 1903-1929. Flora of the Upper Gangetic Plain and of the adjacent Siwalik and Sub Himalayan Tracts (completed by Parker. R. N. & Turrill W.B.) 3 Vol. Calcutta.
- Raizada M. B. 1976. Supplement to Duthie's Flora of upper Gangetic Plain of the adjacent Siwalik and sub-Himalayan tracts. Bishen Singh Mahendra Pal Singh. Dehradun.
- Srivastava R. C. 2014. Family Polygonaceae in India. Indian Journal of Plant Sciences. 3(2): 112-150.
- 5. Sinha G. P. and A. N. Shukla. 2020. Flora of Uttar Pradesh. Vol 2. Botanical Survey of India. Calcutta.
- Misra, B. K. & B. K. Verma 1992. Flora of Allahabad district, Uttar Pradesh, India. Bishan Singh, Mahendra Pal singh, Dehradun.
- Mudgal V, K.K. Khanna & P.K. Hajra 1997. Flora of Madhya Pradesh. Vol. 2. Botanical Survey of India. Calcutta.
- 8. Jain S. K. and R. R. Rao. 1977. A Handbook of Field and Herbarium Methods. Today and Tomorrow's Printers and Publishers, New Delhi.
