

***Persicaria chinensis* (Linnaeus) H. Gross var. *hispida* (Hooker f.)
Kantachot (Polygonaceae): a new distributional record
for West Bengal, India**

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Submitted : 12.07.2016

Accepted : 18.09.2016

Published : 30.12.2016

Abstract

Present work spotted a small bushy habitat of, *Persicaria chinensis* (Linnaeus) H. Gross var. *hispida* (Hooker f.) Kantachot, a less known member of family Polygonaceae A. Jussieu on the hilly slopes at Kalimpong of Darjeeling Himalaya of West Bengal. This weak annual herb is quite rare and recorded from its extended geographical area outside the Meghalaya and Nagaland of India and first time enlisted for the flora of West Bengal. The taxonomic features, ecological notes and photographs of the species are provided.

Key words : *Persicaria chinensis* (Linnaeus) H. Gross var. *hispida* (Hooker f.) Kantachot, distribution, new record, West Bengal

INTRODUCTION

Family Polygonaceae A. Jussieu (Buckwheat or Knotweed family) comprises 59 genera and about 1384 species (www.plantlist.org) distributed from the tropics to arctic, although most species are concentrated in the northern temperate region^{[1],[2],[3]}. Many members of this family are confined to Himalayan regions of which West Bengal and Sikkim occupies the prominent position. In India around 121 species and 29 varieties belonging to 12 genera of this family are growing in various habitats^[4]. *Persicaria chinensis* (Linnaeus) H. Gross is a large herb with climbing tendency and is growing in various climatic conditions starting from the sub-himalayan plains ascending to the altitude of 1800 m of Himalayas. *Persicaria chinensis* (Linnaeus) H. Gross is showing various morphotypes and some of them are already established as varieties by various authors. Sir J. D. Hooker described 6 varieties of *Persicaria chinensis* (Linnaeus) H. Gross including *Polygonum chinense* var. *chinense*, *Polygonum chinense* var. *ovalifolium* Meissner, *Polygonum chinense* var. *paradoxum* (Hector Léveillé) A. J. Li, *Polygonum chinense* var. *hispidum* Hooker f. *Polygonum chinense* var. *corymbosum* Meissner, *Polygonum chinense* var. *parvifolia* Hooker f. from the undivided India.

J. D. Hooker (1886)^[5] established the variety *P. chinense* var. *hispidum* Hooker f. based on the deposited herbarium specimen (Collection No. 175; CAL accession no. 374594) that was collected by Gallatly from the hills of Tenasserim, a Tenasserim Hills or Tenasserim Range is the geographical name of a roughly 1,700 km long mountain chain of Myanmar, which is not now a part of India. This species was recorded from the Mountain slopes of Himalayan between the ranges of 600-2800 m in China^[6]. In India, this species was recorded only from Khasi hills of Meghalaya and Kohima of Nagaland^[4] few years back. Now, beyond these two locations it is first time recorded from the West Bengal and as 3rd distributional record from India (Fig. 1).

Prain (1903)^[7] has first time accounted the species strength of this family from the undivided Bengal. 48 species of Polygonaceae, among them three varieties of *Polygonum chinense* (*Polygonum chinense* var. *ovalifolium* Meissner,

Polygonum chinense Linnaeus var. *chinense* and *Polygonum chinense* var. *brachiata* (Linnaeus) H. Gross were reported from this state^[8]. Paul *et al* (2016)^[9] recently studied the detailed foliar micro-morphology of eight species of *Persicaria* from this region.

OBSERVATION & DISCUSSION

During the survey of various members of Polygonaceae in West Bengal (since 2015) in different geographical areas specially from Northern part of West Bengal, few interesting specimens of *Persicaria chinensis* (Linnaeus) H. Gross were collected from the hilly slopes of Kalimpong of Darjeeling district of West Bengal. The specimen was critically investigated using various literatures^{[5],[6]} and matching with the specimens of CAL and finally identified the specimens as *Persicaria chinensis* (Linnaeus) H. Gross var. *hispida* (Hooker f.) Kantachot. The voucher specimens pertaining to this species will be deposited in the CNH, Sibpur, Howrah and NBU herbaria. Detailed morphological description, photographs and ecological annotations for the plant are provided in the article.

***Persicaria chinensis* (Linnaeus) H. Gross var. *hispida* (Hooker f.) Kantachot, Thai Forest Bull. Bot. 38: 135. 2010. *Polygonum chinense* Linnaeus Sp. Pl. 1: 363. 1753; *Polygonum chinense* var. *hispidum* Hooker f., Fl. Brit. Ind. 5(13): 45. 1886; *Polygonum chinense* var. *scabra* Gage, Rec. Bot. Surv. India 2: 408.1903 Li *et al.*, Fl. China 5. 301. 2003. (Fig 2)**

Perennial herbs. Stems erect, 84 cm tall, ligneous at base, much branched, striate, retrorsely hispid. Petiole 2 cm, auriculate at base; lamina ovate-elliptic, 4 16 x 1.5 8 cm in diameter, both surface hispid, base broadly cordate, margin entire, apex shortly acuminate; ocrea tubular, 1.2 cm long, membranous, hairy, much veined. Inflorescence terminal, capitates, 4 mm long, aggregated, hispidly hairy; bract broadly ovate, each 3 flowered. Perianth white, 5-parted; tepals ovate, acrescent in fruit; stamens 8, included; style 3, connate. Achenes included in persistent perianth, black, opaque, broadly ovoid, trigonous, 3 mm long.

Flowers & Fruits: August - November.

Distribution: Myanmar, Thailand, China and India (Khasi

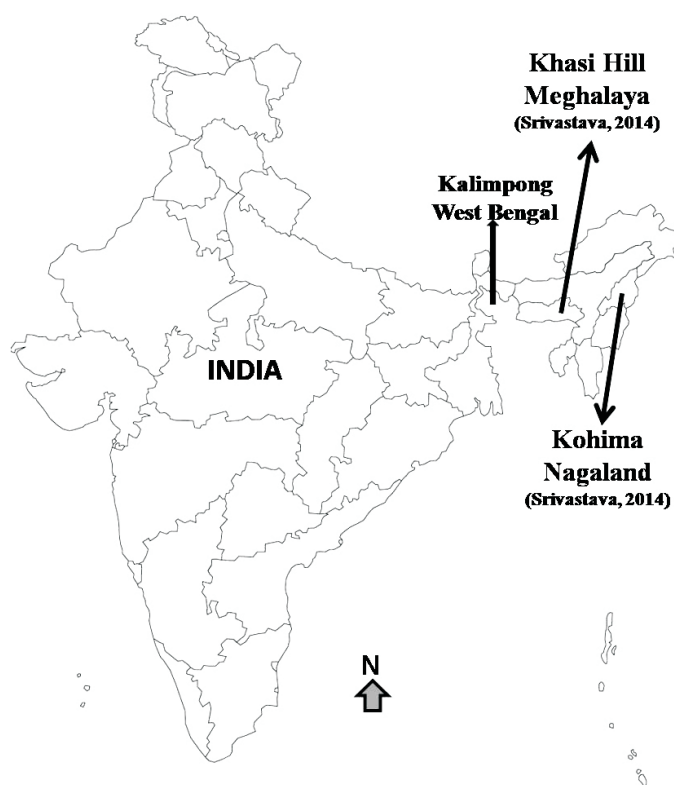


Fig. 1: Indian geographical distribution of *Persicaria chinensis* (Linnaeus)
H. Gross var. *hispida* (Hooker f.) Kantachot

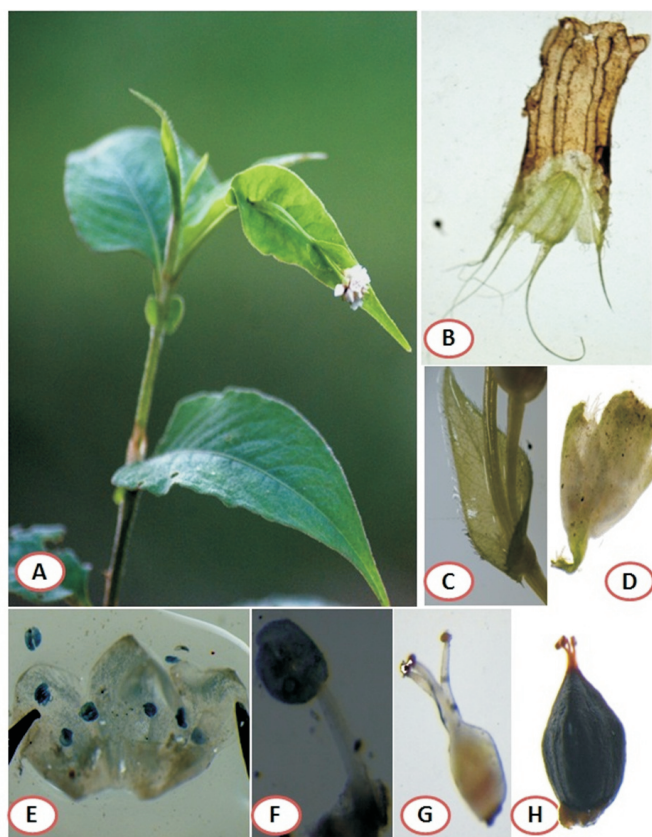


Fig 2. . *Persicaria chinensis* (Linnaeus) H. Gross var *hispida* (Hooker f.) Kannachot A. Plant in habit B. Ocrea C. Hispid Bract D. Single flower E. Split open perianth F. Androecium G. Gynoecium H. Achene

hills of Meghalaya, Kohima of Nagaland and now from hilly slopes (Durpin) of Kalimpong, Darjeeling, West Bengal); rare occurrence.

Ecological Notes: The species is growing on moist bushy hilly slopes in association with *Persicaria runcinatum* Buchanon-Hamilton ex D. Don, *Persicaria chinense* (Linnaeus) H. Gross, *Oplismenus burmannii* (Retzius) P. Beauvois, *Commelina diffusa* Burman f., *Pauzolia hirta* Blume ex Hasskarl, *Sida cordifolia* Linnaeus etc.

Specimen examined: Durpin (27°02'14.79" N latitude & 88°27'36.98" E longitude), Kalimpong, West Bengal, Payel Paul & M. Chowdhury, 0038, 0040, 0042 dated 04th October, 2015.

CONCLUSION

Persicaria chinensis (Linnaeus) H. Gross var. *hispida* (Hooker f.) Kantachot is one of the important variety that is reported from Myanmar, Thailand, China and North east India and is endemic to South-east Asia. This species is first time recorded outside the North-east India (Meghalaya and Nagaland). The Species is quite rare in distribution and it is gradually spread over extended ranges of Himalaya. Presently only one considerably large population of this variety is traced at Durpin (Kalimpong) of Darjeeling Himalaya.

ACKNOWLEDGEMENT

First author is grateful to UGC-BSR for financial assistance during the entire period of times. Dr. T. K. Pal, Scientist, Central National Herbarium, BSI, Shibpur is also acknowledged for his assistance regarding the identification of species.

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