



## ***STYLOSANTHES CALCICOLA* SMALL (FABACEAE), NEW DISTRIBUTIONAL RECORD FOR ASIA**

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(RECEIVED 22 SEPTEMBER 2017; RECEIVED IN REVISED FORM 31 JANUARY 2018; ACCEPTED 22 MARCH 2018)

**ABSTRACT** – The paper deals with a new distributional record of *Stylosanthes calcicola*, a naturalised taxon for Asia. Taxonomic account of the species, description, and photographs are provided to facilitate its identity. The species is distinguished from other species of *Stylosanthes*, based on the almost straight beak of lomentum.

**KEYWORDS** – ALIEN SPECIES, BIODIVERSITY, INDIA

### **INTRODUCTION**

*Stylosanthes calcicola* Small is commonly known as **Everglade Key Pencil-flower**. Genus *Stylosanthes* Sw. is represented by 47 species all over the globe (The Plant List, 2013). These species are mostly confined to Bahamas, Cuba, Guatemala, Mexico, Florida (Oyer, 1989). *Stylosanthes fruticosa* (Retz.) Alston, *S. guianensis* (Aubl.) Sw., *S. hamata*, and *S. sundaica* Taub. have already been enumerated in Legumes of India (Sanjappa, 1991). *Stylosanthes calcicola* Small has not been reported so far from Asia. The species is very important as a source of protein, fodder and green manure to enrich the soil fertility for agricultural crops. The natural introduction of this legume species is economically significant for improvement of the soil quality and to check the soil erosion. The stable characters that distinguish *Stylosanthes calcicola* from the other area an almost straight beak of lomentum (Figure 1) and a line of white hairs on one side of the stem.

Perusal of floristic literature, including Mohlenbrock (1957, 1963), (McIvor & Bray 1983), (Chatterjee, 1985), (Sanjappa, 1991), (Ramesh et al., 1997), (Heinrich, 2002), (Kumar & Sane, 2003), (Chandra et al., 2006), (Pathak et al., (2004), (Chandra, 2009), (Kumar et al., 2014), indicates that the species has not been reported from any country from Asia. Therefore, the aim of this paper is to show a new record of *Stylosanthes calcicola* as an addition to the Flora of Asia.

### **MATERIAL AND METHODS**

The specimens were collected from Jammu and Kashmir, district Samba of Jammu and Kashmir and identified as *Stylosanthes calcicola* Small (Fabaceae) by consulting relevant taxonomic literature including Mohlenbrock 1957,



**Figure 1.** *Stylosanthes calcicola* Small: A, Plants in nature; B, upper part of the stem showing inflorescence; C, Part of pod showing long pointed apex.

1963 (Figure 2). The identification of the species was further confirmed by comparison from specimens from Kew Herbarium, cited below: [kew.org/hercat/getImage.do?imageBarcode=K000827876](http://kew.org/hercat/getImage.do?imageBarcode=K000827876)

The species perhaps have transferred along with other species of the genus.

The voucher specimens are deposited in the Herbarium section of the Department of Botany, University of Jammu (JUH), Jammu.

## RESULTS AND DISCUSSION

### Taxonomic Treatment

*Stylosanthes calcicola* Small, Man. S.E. Fl. U. S. 730. 1933; Mohlenbrock, Ann. Mo. Bot. Gdn. 44: 299- 355. 1957.

Annual or perennial, 30 – 65 cm tall, erect or ascending herbs; stem branched from the base, minutely pubescent along one side otherwise glabrous. Leaves trifoliate, 20 –35 × 15 – 26 mm leaflets 12 – 16 × 2.5 – 3.4 mm, lanceolate to ovate, acute to acuminate, glabrous or ciliate on margins near to the base, veins 3 – 5 pairs, conspicuous, petioles 4 –5 mm long, pubescent initially becoming glabrous at maturity. Inflorescence a spikes narrowly oblong or ovoid, about 1 cm long, flowers

2 or more; bracts unifoliate, sheath equalling or twice as long often bristly outside; outer bracteole 1, about 3 mm long, inner ones smaller, ciliate at the apex; calyx tube 3.2– 4.5 mm long; corolla papilionaceous, standard obovate, 4.5 – 6 mm long, wings 4 –5 mm long, auriculate, keel falcate, 3.5 – 4.5 mm long; stamens 10, monadelphous, dimorphic, 5 with versatile anthers alternating with 5 with basifixed anthers, carpels single, stigma minute, terminal, style persistent in fruits; lomentum 6 – 7.5 mm long, 1.5 – 2 mm broad, conspicuously nerved, both articulations usually fertile, beak straight or slightly curved, white hairy initially becoming glabrous with age.

**Specimens Collected:** India: Jammu and Kashmir State, Samba district, Rahya-Suchani (Bagla) latitude 32. 635749 to 32. 637162 N and longitude 75. 013696 to 75. 015178 E, Bhellum 22545.

**Distribution:** India (Jammu and Kashmir), Bahamas, Cuba, Guatemala, Mexico, USA (Florida).

## ACKNOWLEDGEMENTS

The author is grateful to Prof. A. K. Koul, Dean Academic Affairs, BGSB. University, Rajouri and Prof. Rani Magotra University of Jammu, Jammu for valuable suggestions and encouragement. My sincere thanks are due to anonymous reviewers for their helpful comments to improve the manuscript.

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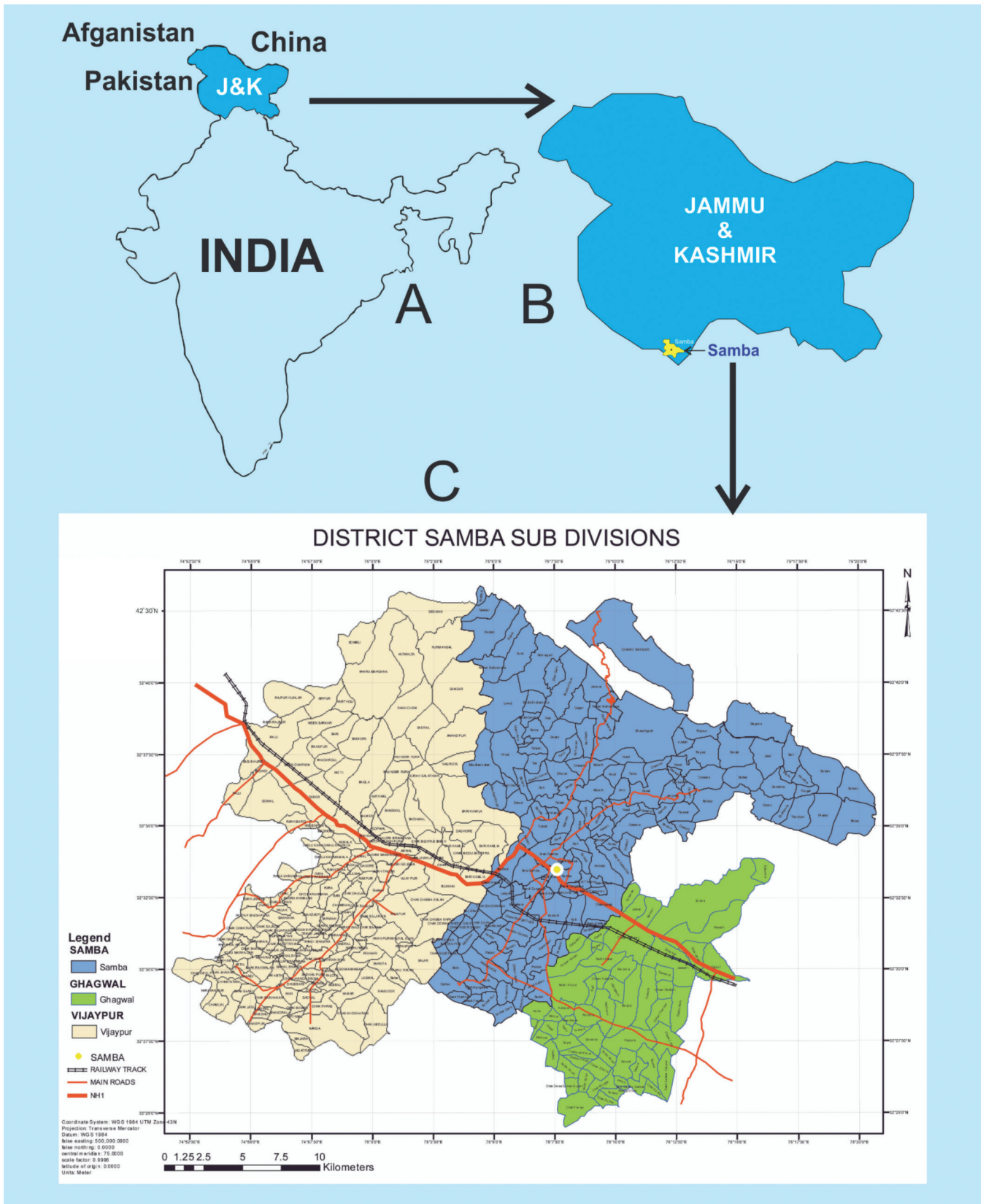


Figure 2. Map; A, India; B, Jammu & Kashmir State; C, District Samba.

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