



Short communication

Recollection of *Stellaria congestiflora* H. Hara (Caryophyllaceae) with new distribution record from Western Himalaya

Satish Chandra*, D. S. Rawat and Jyotsna Rastogi

Department of Biological Sciences, College of Basic Science & Humanities, Govind Ballabh Pant University of Agriculture and Technology, Pantnagar-263145, Uttarakhand, India

*Corresponding Author: satishchandrasemwal07@gmail.com

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Stellaria congestiflora H. Hara (Caryophyllaceae) is an endemic herb found in alpine zones of Tibet and Himalayan regions. The species was described by Hara (1977) from Taglung, South of Tukucha, Kali Gandaki, Nepal and known to be common near the base of Mount Everest, Nepal. Globally the species has been recorded in Xizang area (Tibet) China, Bhutan, Nepal and India (Grierson 1984, Press *et al.* 2000, Pusalkar & Singh 2010, Shilong & Rabeler 2001). In India this species is represented by only two specimens; one from Sikkim (Below Phaklung rocky gully, Lasha Chhu, North district) and other from Uttarakhand (opposite Gothing, Chamoli). From Uttarakhand this species was collected by B.D. Naithani in 1975 but he erroneously identified specimens as *Arenaria festuroides* Benth. Later, Pusalkar & Singh (2010) correctly identified specimen as *Stellaria congestiflora* and reported its presence in India from Uttarakhand and Sikkim. On account of only two collections in Indian Himalayan region this species is rare, though it is reported common in Nepal Himalaya.

A routine plant exploration visit was conducted in Upper Nandakini valley and Roopkund area of Chamoli district in August–September, 2014. Plant specimens of *Stellaria congestiflora* were collected from Homkundi area (30°18'30" N & 79°44'16.2" E, 4000 m elevation) near Shila samudra glacier in district Chamoli, Uttarakhand state, India. Species was identified with the help of protologue, description of species (Hara 1977, & Rabeler 2001, Pusalkar & Singh 2010), specimen housed at BSD (Herbarium of Botanical survey of India Northern Regional Circle Dehradun), images of isotype and other specimens at Royal Botanic Garden Edinburgh (E) accessible through internet.

Species description

Stellaria congestiflora H. Hara in J. Jap. Bot. 52: 195. 1977; Stainton in Fl. Himalaya suppl. 7. Pt. 12.1988; Shilong & Rabeler in Wu *et al.* Fl. China, 6: 27. 2001; Pusalkar & Singh in Ann. Forestry 18(1): 56. 2010.

Herbs, perennial. Stem tufted, branched at base, 5–10 cm tall, internode shorter than leaves, branches villous on upper part, trichomes uniseriate, eglandular. Leaves sessile, ovate–lanceolate, 8–12×1.5 mm, greenish-yellow, pungent, base obtuse, margin entire, apex acute, eglandular hairy at both surfaces and margins in proximal half, distal half glabrous, mid vein conspicuous, ridged at abaxial surface, lateral veins obscure. Flowers in dichasial cyme, forming corymbose tufts, 7–17 flowers in each corymb. Bracts foliaceous, pale green, linear–lanceolate, mid vein prominent, 6–10×1.5 mm, glabrous. Pedicel slender, 0.3–1.0 cm long, villous hairy. Sepal 5, ovate–lanceolate, 5–8×1.5–2.0 mm, hairy toward base at abaxial surface, upper part glabrous, margin scarious, apex acute, veins 3. Petal 5, white, 1–2(2.5) mm, bipartite up to base, lobes almost equal, linear, apex obtuse, veins obscure. Stamen 10, equal to slightly longer than petals, antisepalous comparatively longer and with prominent gland at base, filament 0.5–2.5 mm, anther brown. Ovary ovoid, 1.5–2.0×1.0–1.5 mm, style 3, equal to ovary. Capsule ovate, 2.0–2.5×1.5 mm, enclosed within persistent sepals, opening by 6 valves to base. Seed brown, 4–8 per fruit, *ca.* 1 mm diameter, sub-orbicular, surface, rugose (Fig. 1).

Flowering & Fruiting: August–September.

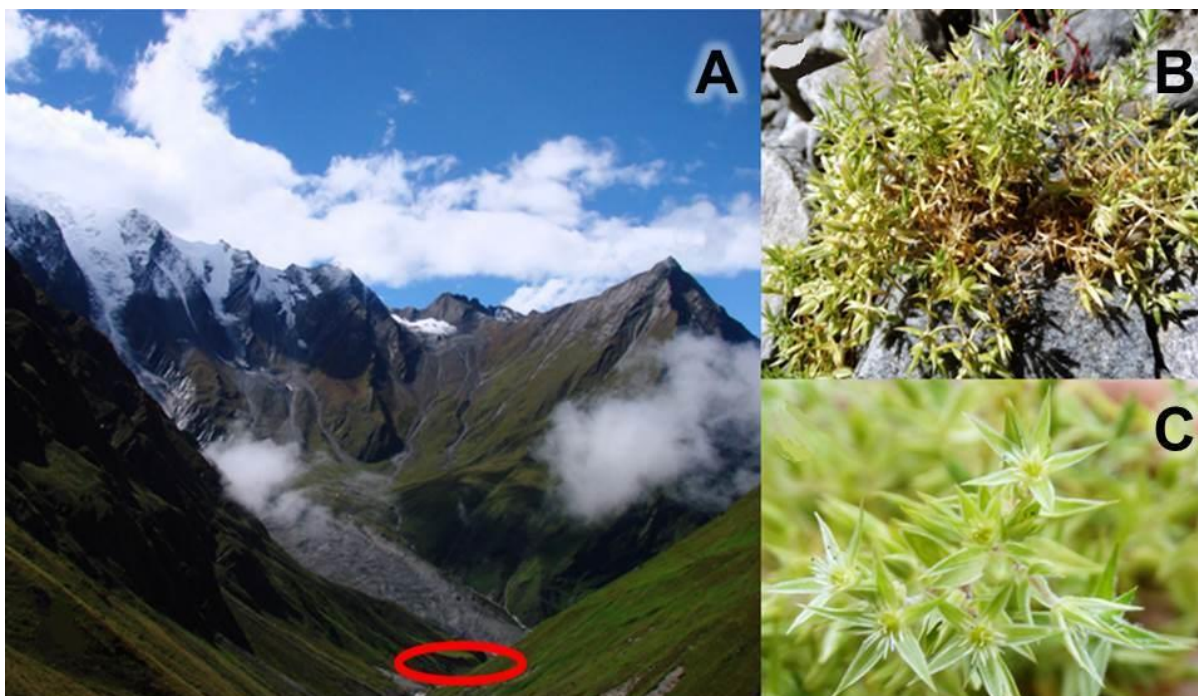


Figure 1. **A**, Location near Silasamudra glacier in Western Himalaya from where species was collected, red circle indicate area of specimen collection; **B**, Plant of *Stellaria congestiflora* H. Hara.; **C**, Flowers of *Stellaria congestiflora* H. Hara.

Specimens Examined: NEPAL, Taglung, South of Tuckucha, Kali Gandaki, 14500 ft., 16.07.1954, *Stanton, Sykes & William* 1825 Isotype (E) (Image !). BHUTAN, Alooktha, 15000 ft., 12.08.1913, *Ribu & Rhomoo* 995 (E) (Image !). INDIA, Sikkim, North district, Lasha Chhu, below Phaklung, 4440 m, 19.07.1996, *D.G. Long & H. J. Noltie* 343 (E) (Image !); Uttarakhand, Chamoli district, opposite Gothing, 12.09.1975, *B. D. Nainthani* 56215 (BSD)!; Homkundi area, near Shilasamudra glacier, 01.09.2014, *D.S. Rawat & Satish Chandra* 704 (Govind Ballabh Pant University Herbarium Pantnagar, Uttarakhand, India) !.

Habitat: Occasional among boulders along stream banks between 4000–4200 m elevation, with *Stellaria decumbens*.

Present collection of *Stellaria congestiflora* from Shila Samudra Glacier area in upper Nandakini valley (Chamoli district) represent the westernmost limit of this species in the Himalaya. Earlier report of its occurrence in Gothing area, Chamoli district (Uttarakhand) by Pusalkar & Singh (2010) was considered as the westernmost end of this species at 30°50'40" N & 79°48'25" E but the present collection at 30°18'30" N & 79°44'16.2" E (based on wikimapia.org) is further 4' westwards and more than 60 km (aerial distance) away from Gothing. The earlier report by Pusalkar & Singh (2010) was based on a specimen collected in 1975 after which it was never recollected from any area in Uttarakhand. No inclusion in Caryophyllaceae of India (Majumdar 1993), in Flora of Sikkim (Srivastava 1998) and in Flowering Plants of Uttarakhand (Uniyal 2007) clearly indicate it as a rare species in Indian Himalaya. Assessment of its populations as per the recent IUCN criteria is suggested for ascertaining its status in India.

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