Carex polycephala Boott (Cyperaceae): A New Distribution Record for Western Himalaya
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Carex L. is one of the largest genera among flowering plants and the largest of family Cyperaceae. As per the World Checklist (WCSP, 2015), there are 1,816 species distributed worldwide. Although North America and Eastern Africa are the main centres of diversity (Starr et al. 1999), Carex is well represented in India with about 160 species, especially in the Himalayas. There are 40 species of Carex reported from the Himalayan State of Jammu & Kashmir (Ehtisham-ul-Haq et al. 2012).

While working on the Indian specimens of Carex, authors came across a collection of two specimens from Burzil in Kashmir. These specimens in CAL were originally identified as Carex nivalis Boott, but a critical examination of the specimens and perusal of literature revealed that these are nothing but Carex polycephala Boott, found in the Indian states of West Bengal, Sikkim and Arunachal Pradesh, and in the neighbouring countries Bhutan and Nepal. Therefore, based on the present finding, it is reported here as a new distribution record for Western Himalaya and with this new addition, total number of Carex species in Jammu & Kashmir has gone up to 41. A detailed description, illustration and other relevant information are provided for easy identification.

Materials and methods
Available literature on the genus Carex were consulted and digital image of the type specimen of Carex polycephala was downloaded (https://science.mnhn.fr/institution/mnhn/collection/p/item/p00294230 - accessed on 20.04.2015) to match with the Kashmir specimens. Also the herbarium specimens from West Bengal, Sikkim and Arunachal Pradesh, available in CAL were studied to compare with the Kashmir specimens.

Taxonomy

Type: INDIA: Sikkim, 9-10,000 ped, (ft.) J. D. Hooker s.n. - Isotype P (Image) ! (barcode: P00294230).

Perennial with short rhizome, 20-45 cm high. Rhizome ultimately woody, clothed with brownish bladeless sheaths. Culms stout, acutely trigonous, 2-3 mm thick, enclosed by the leaf sheaths. Leaves linear, acuminate at apex, equalling or exceeding the culm, 13-36 cm long, 4-6 mm wide, scabrous on the margins towards apex; lower ones reduced to bladeless sheaths; sheaths pale brown at base, ribbed, not persisting as fibres. Inflorescence usually a narrow panicle with 4-6 nodes; peduncles in groups of 2-9, relatively slender, erect, each bearing a single spike or sometimes branched with up to 4 spikes. Bracts foliaceous, sheathing, exceeding the inflorescence. Spikes androgynous, all similar, narrowly ellipsoid, 2.6-2.9 × 0.4-0.8 cm. Male part 7-9 × 2-3 mm, brownish, many-flowered. Glumes membranous, linear-lanceolate, acute at apex, 6-6.1 × 1.2-1.5 mm, hyaline to very light brown, with a prominent midrib. Stamens 3; filaments elongate up to 1.5 mm; anthers linear-oblong, c 2 mm long. Female part oblong, 18-20 × 6-8 mm, densely many-
flowered. Glumes lanceolate, acute at apex, 4.9-5.2 × 1.1-1.3 mm, hyaline or straw-coloured, with a prominent mid-vein. Style 2 mm long; stigmas 3, protruding through the apex of the utricle. Utricle trigonous, narrowly ellipsoid, gradually narrowed into a long beak, 3.8-4.2 × c 1.8 mm (including the c 1.8 mm long beak), brownish, glabrous; beak shortly bifurcate at apex. Achene trigonous, ellipsoid, 1.3-1.5 × c 1 mm, brown.

**Flowering & Fruiting:** May-October

**Distribution:** India: Jammu & Kashmir, Sikkim, West Bengal and Arunachal Pradesh. Nepal and Bhutan.

Specimens examined: India, Jammu & Kashmir: Burzil, 10500 ft., 26.07.1876, C. B. Clarke 29631 (CAL). Sikkim: Rungporoon Valley, May 1887, J. L. Lister s.n. (CAL); Rulhart, 7000 ft., 11-10-1870, C. B. Clarke 12986C & 12986E (CAL). West Bengal: Darjeeling, 8000 ft., 10.05.1876, C. B. Clarke 27875C (CAL); Darjeeling, A. B. Chowdhury 46 (CAL); Tonglu, 30.05.1908, Rhomoo 293 (CAL); Tonglo, 9000 ft., 05.07.1877, J. L. Lister, s.n. (CAL); Tonglo, 1000 ft., May 1887, G. Watt 5357 (CAL).

Arunachal Pradesh: Dibang Valley, Mayudia pass, 2650 m, 19.04.1999, M. Bhaumik 2482 (CAL); Dibang Valley, Mayudia, 2520 m, 13.05.1998, M. Bhaumik 1713 (CAL); Dibang Valley, Chigupani, 1750 m, 5.04.2002, M. Bhaumik 3711 (CAL); Dibang Valley, Mayudia, 2200 m, 24.04.2001, M. Bhaumik 3883 (CAL); Dibang Valley, Way to Chigupani, 1750 m, 05.04.2003, M. Bhaumik 3711 (CAL); Dibang Valley, Mayudia, 2200 m, 23.04.2001, M. Bhaumik 3873 (CAL).

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**References**

