

SHORT COMMUNICATION

Addition to the Rare and Economically Useful Plant Germplasm *Allium clarkei* Hook f. from Uttarakhand

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Key words: *Allium clarkei*, Collection, Germplasm

Genus *Allium* L. (Alliaceae) has 700-1000 species of herbaceous nature and is distributed in the Northern temperate and alpine zones of the world (Buijsen, 1990; Hanelt *et al.*, 1992). Indian Gene Centre is considered fairly rich distribution and occurrence of about 30-35 species including 4-5 cultivated species (Hooker, 1892; Stearn, 1947; Negi, 2006; Negi and Gaur, 1991; Negi and Pant, 1992; Negi *et al.*, 1991, 1993).

During multi crop/region specific/crop specific and ethnobotanical explorations undertaken in Western Himalaya of Uttarakhand (1999-2005), authors came across a less-known, economically useful *Allium* species. This was an addition to the germplasm of Uttarakhand. The species was gathered/collected from the protected habitats i.e. kitchen garden/backyards/ dooryards of Darma Valley of Munsiyari, 29° 9' - 30° 49' N latitude and 79° 45' - 89° 3' E longitude, district Pithoragarh, Uttarakhand situated at an altitude of 1500 m asl.

After critical morphological studies and comparison with the herbarium material preserved in Northern Circle, Botanical Survey of India, Dehradun (BSD) and Indian Council of Forest Research and Education (erstwhile Forest Research Institute) Dehradun (DD), species was confirmed as *Allium clarkei* Hook. f.

No relevant account of this *Allium* species has been made in recent compilations (Polutin and Stainton, 1984; Naithani, 1984; Chandel and Pandey, 1992; Sharma *et al.*, 1996; Gaur, 1999; Pandey and Pandey, 2005). Hooker (1892) has reported it from Kashmir at Skardo (North-West Himalaya). Singh and Singh (1992) have reported its wild population from Valley of Flowers, Chamoli, Uttarakhand. This species is endemic to north-west Himalaya at 1500-3800 m. altitude (Negi, 2006).

A detailed taxonomic description, distribution, habitat, uses etc., along with figure (Fig. 1) of the specimen are provided here to facilitate further collection and easy identification. Seeds/bulbs and plant specimens

have been rejuvenated, multiplied and maintained at Field Gene Bank of NBPGR, Regional Station Bhowali, Nainital, Uttarakhand. This species is an addition, rare and economically useful plant germplasm from Uttarakhand.

Description

Allium clarkei Hook. f. Fl. Brit India 6: 344 (1892).

Annual herb, 50-55 cm high; bulbs small, single, ovoid 2.5 cm long, outer scales closed and finely reticulated pale; leaves 4-8 (sometimes 10-32), 25.0 -35.0 X 0.6

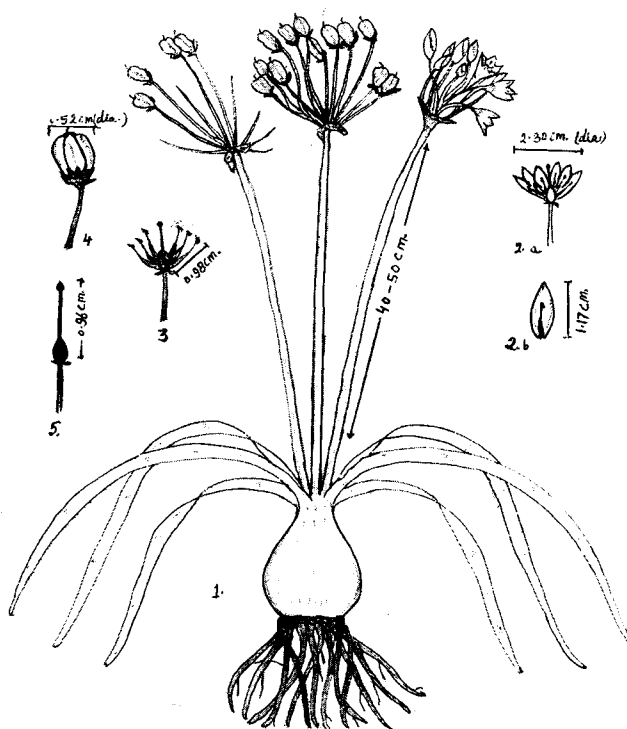


Fig. 1: *Allium clarkei* Hook f.
1) Annual herb with bulb, leaves and flower spikes;
2 a. Flower with pedicel; 2 b. Sepal;
3. Stamens with ovary; 4. Capsule; 5. Ovary

-1.1 cm, obtuse, flat, sub-basal, shorter than the slender scape; scape 40 - 50 cm long, terete; head 4.5 - 5.5 cm dia., lax fid; pedicels 16-22 nos., 2.2 - 3.5 cm long; flowers stellate, white, perianth 0.90 cm long, acuminate; stamens shorter than perianth, filaments inserted near their bases, anthers large; ovary sub-globose; style included; capsule broadly obcordate, 0.40 - 0.52 cm dia., 10-20 seeds in each capsule; seeds black and smooth. Smell of crushed leaves pungent like onion.

Specimens examined: Valley of Flowers, Chamoli, Uttarakhand, BSD 29571; Hoshiarpur, Punjab, BSD 41521; Mulekh, Ladakh, BSD 58841.

Distribution reported: Mapwabad- Munsyari-Madkot-Daranti Kanta, Pithoragarh, Uttarakhand; October 22, 2002; Voucher specimen: AKS-126/IC383446, 1500-2000 m; Field Gene Bank of NBPGR, R/S Bhowali, Nainital, Uttarakhand.

Ecology: Semi-domesticated in kitchen gardens/ dooryards/ backyards of natives.

Phenology: Flowering and Fruiting: April-June.

Uses: In district Pithoragarh, *Allium clarkei* Hook. f., locally called as 'Pharan'. Young leaves are cooked as pot herb or aromatic vegetable mixed with potato. Dried leaves are used as condiments. Bulbs are eaten raw or cooked. Dried leaves and floral spikes are being sold @ Rs. 10/- to Rs. 15/- per ten gms in the local market of Uttarakhand.

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