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RESEARCH ARTICLE

A NEW SPECIES OF *PANAX OHBI* SP.NOV. IN SIKKIM HIMALAYA

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ABSTRACT

The Himalayan Ginseng of Sikkim is the potential plant having the efficacies of treating diseases. This paper deals with the new reporting of *Panax* in Sikkim Himalaya. Thus, *Panax ohbi* sp. nov. is purposed with the taxonomic characters. It is documented for the scientific purposes which, in turn, benefit to the taxonomy and plant science.

Key words:

Himalayan Ginseng,
Panax ohbi sp. nov.
Sikkim Himalaya.

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INTRODUCTION

Sikkim bestowed with the diversity of *Panax* that is growing in natural vegetation at the different altitude from sub-temperate to alpine regions. The Himalayan ginseng is used for treating several ailments such as sexual potential enhancement, stamina, anti-cancerous to name a few (Tanaka *et al.*, 1985; Shao *et al.*, 1989; Pradhan, 2009). Noteworthy point is that *Panax* of Sikkim and Darjeeling Himalaya depicted the different characters at the different regions that attracted many inquisitive minds and academicians (Hara, 1970). In particular, the variation of the leaves shapes is recorded the most common pattern. The specimen of this study was taken from the collection of Tokyo Expedition Team. During the scientific botanical study, the Tokyo expedition team collected this species from the North Sikkim that was deposited in the Sikkim's Forest Department. Recently, the specimen studied and documented whereby it is analyzed and ascertained new taxonomic characters in the collected specimen. Thus, this paper presented a new species, *Panax ohbi* sp. nov., based on the taxonomic characters.

MATERIAL AND METHODS

Representative specimen was collected from the North Sikkim. Herbarium specimens were prepared following standard method (Ranjan, 2018) and deposited at SSFH, Sikkim State Forest Herbarium, Gangtok. Extensive literature surveys were conducted (Clarke, 1879; Hara, 1966, 1970; Wu *et al.*, 2013).

TAXONOMIC TREATMENT

Panax ohbi D.K. Pradhan, sp. nov.

Most of the Sikkim's Himalayan collection of *Panax* have long creeping rhizomes bearing nodes which vary in the shape, sizes and intermodal distances. Such diversity of *Panax* was presented to address the taxonomic discrepancy by Hara (1970). However, *Panax ohbi* sp. nov. is different from the other species of *Panax* based on the taxonomic identity. The unique identity of this species is that it has broad lobed serrate leaf, long peduncle, short carrot like modified root. These key characters of *Panax ohbi* sp. nov. differ from existing other species namely, *Panax pseudoginseng*, *Panax bipinnatifidus*, *Panax japonicus*, *Panax ginseng*, *Panax arunachalensis* etc. (Banerjee, 1968; Hara, 1970; Sharma and Pandit, 2009; Wu *et al.*, 2013; Taram *et al.*, 2018). Available Herbaria and literatures of the different species of *Panax* growing in the Eastern Himalaya referred which reveal that the species is unique and exceptional. Thus, the new species is proposed as *Panax ohbi* sp. nov.

TYPE: INDIA: SIKKIM, North Sikkim, SSFH SK002111 (Holotype). Field No. 20380081. Date of Collection: 24.07.2002.

Plant Descriptions: Annual herbs, ca. 58 cm tall; rhizomes ca. 2 cm long and ca. 1.5 wide, horizontal short modified root like carrot, no scars and rings at node, no internodes. Erect stem 40-58 cm. Leaves at

the apex, broad leaflet, incised, irregularly densely serrate. Petiole length ca. 8 cm. Five leaflets, palmately compound. Leaflet ca. 10.6 cm long and 1.5 cm wide. Inflorescence a solitary, terminal umbel, peduncle ca. 26 cm.

Flower pedicel ca. 0.7 cm. Filaments longer than petals. Ovary 2-carpel, 2- styles. Fruit ca. 4 mm. Tuber length ca. 2 cm long.



Fig. 1. *Panax ohbi* sp. nov

Flowering: June- July; **Fruiting:** August- September

Distribution: Sebang (2300m), Tharum (Marsh) 3270 m, Lane (Stream) 3330 m, Chokao (3350m)- Gayn 93400m), Gay Chu (bridge) (3460 m), Yutoney (3510m)- Lachung Thosa (3560m), Lachung Thosa camp (3650m), Sebang (3200m), Chachu (2960m), Tarum Chu Bridge (2210m).

Conservation Status: This species is distributed in the restricted areas of North Sikkim. In virtue of the restricted distribution, the species is categorized as Critically Endangered (CR) ([https:// cmsdata. iucn.org](https://cmsdata.iucn.org) IUCN, 2014).

Etymology: The species epithet is dedicated to Prof. Ohba of the Tokyo University under whose guidance the Expedition of Northern Sikkim conducted in 2002.

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