A General Account on Traditional Medicinal Uses of *Dactylorhiza hatagirea* (D. Doon) Soo

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Abstract: *Dactylorhiza hatagirea* (D. Doon) Soo a potential orchid, commonly known as Hattajari and Salampanja, traditionally used by the natives of higher altitudes of Himalaya for treating different ailments. This species has high medicinal properties but dwindling rapidly from nature which is alarming need of its conservation. Present study aimed to assess general information about plant emphasis on traditional medicinal uses based on close contacts of native of Garhwal Himalaya and available literature which would be a cumulated account of this species. [New York Science Journal 2010;3(2):78-79]. (ISSN: 1554-0200).

Keywords: Traditional medicine, Terrestrial orchid, Salep, Garhwal Himalaya.

1. Introduction

India is sitting on a gold mine of well-recorded and well practiced knowledge of traditional herbal medicine. But, unlike China, India has not been able to capitalize on this herbal wealth by promoting its use in the developed world despite their renewed interest in herbal medicines (Kamboj, 2000). Ayurveda, the oldest medical system in the Indian subcontinent, has alone reported approximately 2000 medicinal plant species, followed by the Siddha and Unani medical systems (Kala and Sajwan, 2007). The miraculous herbs used in Ayurveda are widely acclaimed as a safe and effective cure for many non surgical body ailments. Some of such wonderful herbal drugs belong to the family Orchidaceae (Sharma, 2008). Dactylorhiza hatagirea (D. Doon) Soo is one of the high value medicinal orchid extensively used in Indian system of medicine particularly in Ayureveda, Siddha and Unani medicine as an aphrodisiac properties (CSIR, 1966).

D. hatagirea is the terrestrial orchid occurs in temperate to alpine regions (2500-5000 m) in India, Pakistan and Nepal (Bhatt et al. 2005). It is commonly known as Hatajari in Uttarakhand and Salampanja in Kasmir. The tubers of this species yield a high quality 'Salep' which is extensively used for its aphrodisiac properties in traditional medicine in different part of Himalaya. As the annual consumption of 'salep' obtained from the species in India is about 7.38 tonnes (valued at about Rs. 50 lakhs), most of it imported from the other countries (Vij et al. 1992). Present study aimed to gather the baseline information regarding the medicinal uses of this species in natives, belonging to high altitudes of Garhwal Himalaya.

Material and methods

To assess the traditional medicinal uses of this species, close contacts were made with native peoples particularly traditional Vaid (healers), Researchers, Nursery grower and Villagers of Ukhimath block (1311m amsl) of Garhwal Himalaya, District- Rudrapryag, Uttarakhand. Kedarnath, Tungnath and Rudrnath are the nearest alpine meadows of this block and famous religious shrines of Uttarakhand. The information was gathered with the help of questionnaire and personal interviews over various knowledgeable respondents during field visit.

Result and discussion

Peoples living in villages of high altitudes, depends partially or completely on forest resources and maintain their needs like food, fuel, fodder, medicine etc. These people do not have any modern facilities like good hospitals, trained doctors, medicine and they mostly depends on traditional medicinal treatment for their healthcare. Present study observed that the underground part (tubers) of this species is used by native people of Garhwal Himalaya for treating different general debility like, stomachache, bone fracture, cold, wound healing and general weakness of women. Some healers used the tuber paste along with different medicinal herbs for treating general weakness of children and women. This species also traditionally used by native of high mountain areas of Himanchal Pradesh in Western Himalaya for treating different ailments (Brij et al,2004). A decoction of Salep with sugar and flavored with spices is a useful drink for the sick and effective in seminal debility, chronic diarrhea and general weakness in

debilitated women after delivery (Chauhan, 1984).

Conclusion of this study is that, D. hatagirea has high value medicinal properties and used by natives of higher altitudes but dwindling rapidly from the wild, which is alarming its conservation. Continuous exploitation of several medicinal plant species from the wild and substantial loss of their habitats during the past 15 years have resulted in the population decline of many high value medicinal plant species over the years (Kala,2003, Planning Commission report,2000). Due to various levels of disturbances, destruction of number of economically important plants in alpine meadows is continued like declining of *D. hatagirea*, from its natural population (Giri et al. 2008). It has been categorized as critically endangered (Kala, 2000), rare (Samant et al 2001) and listed under appendix II of CITES (Unival et al 2002). There is a wide gap between the supply and demands of D .hatagirea in West Himalaya where the supply is about 100t and demand is 500 t (Mishra, 1998). Therefore this is an urgent need of mass scale propagation of this species, which would be only possible by applying the Biotechnological and Conventional methods. Plant tissue culture techniques are best tools for mass scale propagation and conservation of this species.

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