

Perspective Paper

A new locality record for an endangered tree species *Pittosporum eriocarpum* Royle (Pittosporaceae) in India

Shreekar Pant^{1*}, Sukalp Sharma², Virbala Sharma³ and Ulsheeda⁴¹Conservation Ecology Lab, Centre for Biodiversity Studies, BGSB University, Rajouri, J&K, India.²HPFS, ACF, Bilaspur, Himachal Pradesh, India.³School of Earth and Environmental Sciences, Central University of Himachal Pradesh, Himachal Pradesh, India.⁴Forest Research Institute(FRI), Dehradun, Uttarakhand, India.

Received 29 August, 2014; Accepted 6 February, 2015

***Pittosporum eriocarpum* Royle (Pittosporaceae) an endangered tree species is collected and reported for the first time from the Kangri, Dhamrol village of Bhoranj block which is quite near to Bhareri of Jahu road of district Hamirpur, Himachal Pradesh, North West Himalaya. This makes another locality record for an endangered tree species in the North West Himalaya. A detailed taxonomic description of the species along with colour photographs and specimens examined is presented in this paper to validate the new locality report and for easy identification of the species.**

Key words: *Pittosporum eriocarpum* Royle, locality record, endemic and endangered tree, Himachal Pradesh.

INTRODUCTION

Hamirpur (76° 18' to 76° 44' E and 31° 25' to 31° 52' N), is one of the smallest district of the Himachal Pradesh in terms of area but richest in terms of vegetation because it shares its boundary with district Kangra in the north, Bilaspur in the south, Mandi in the east and Una in the west. It is located in the south western part of Himachal Pradesh, North west Himalaya and the elevation varies from 400 to 1200 m amsl. The hilly tracts of district are totally covered by the famous Shivalik range and supports subtropical to temperate vegetations and offers congenial climatic conditions favourable for luxuriant growth of the vegetation including many rare, endangered species. While enumerating the floristics diversity of the district, an endemic, endangered tree species that is *Pittosporum eriocarpum* Royle has been

collected from Kangri, Dhamrol village of Bhoranj block growing near the agricultural field which is quite near the Bhareri to Jahu road (Figure 1). Further, as per the previous reports, *P. eriocarpum* Royle is an endemic tree species restricted to Uttarakhand Himalaya (Osmaston, 1927; Kanjilal, 1928). Earlier records reported scarce population of *P. eriocarpum* in the lesser Himalayan range including Mussoorie hills and Doon Valley (Singh and Goel, 1999; Pundir et al., 2001; Padalia et al., 2010) in Uttarakhand state in and Chamba, Himachal Pradesh (Chowdhery and Wadhwa, 1984). Further based on the detailed literature and herbaria survey especially from Himachal Pradesh, it was revealed that *P.eriocarpum* Royle (family Pittosporaceae) was reported from only Chamba district, (Chowdhery and Wadhwa, 1984)

*Corresponding author. E-mail: shreekar pant.2@rediffmail.com.

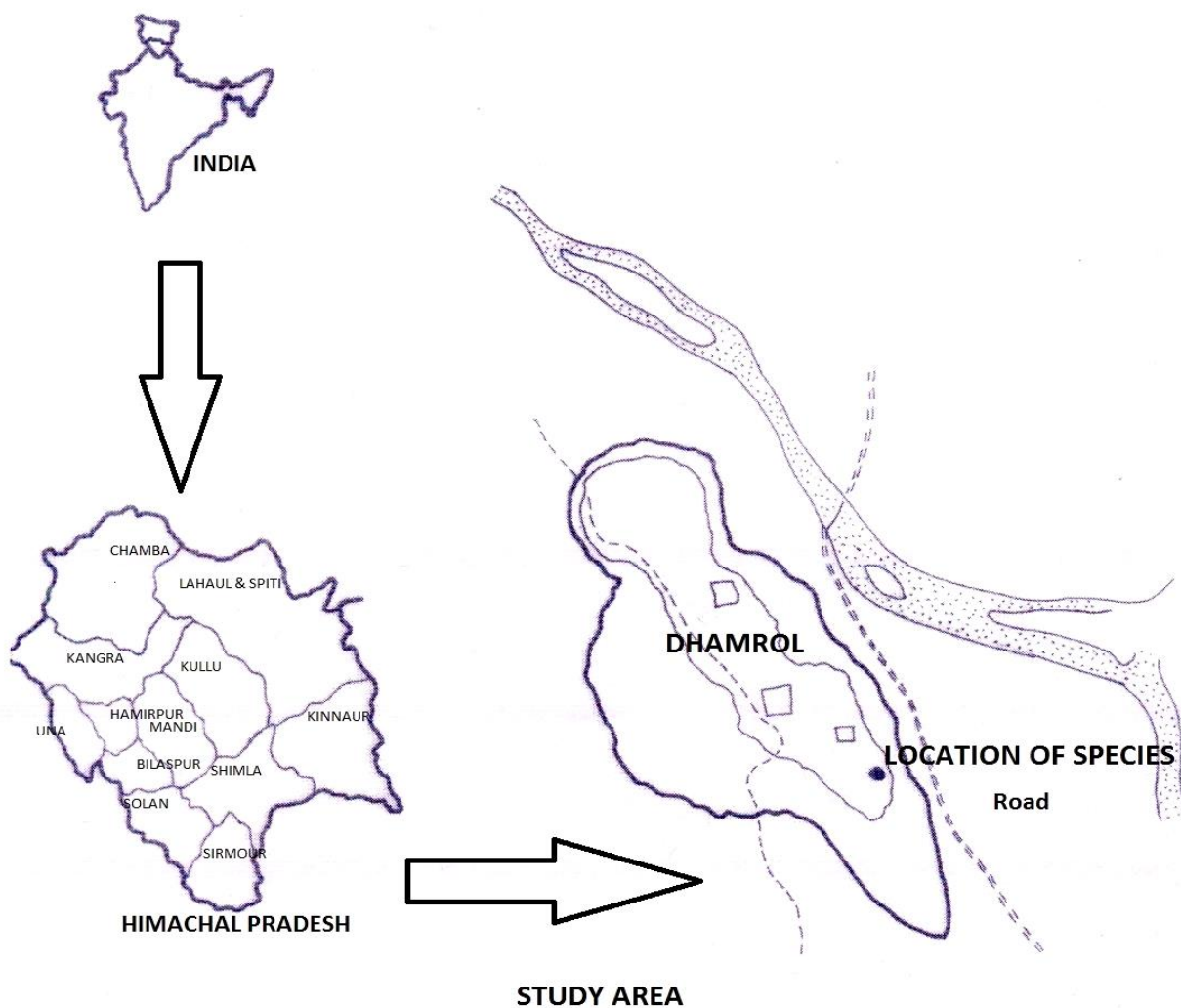


Figure 1. Location map of the study area.

and Rissa Khad Watershed near Riwalsar in Mandi district (Devi, 2013). The presence of this species in such area (locality) shows high conservation value of the Bharari village of Boranj block, and the presence of such species justify by the authors above said the localities is an interesting record. Further the species has been cited as Vulnerable in Red Data Book of Botanical Survey of India (Nayar and Shastri, 1987, 1988, and 1990) and as endangered by International Union for Conservation of Nature and Natural Resources (IUCN) World Conservation Monitoring Centre (WCMC, 1998)

In the present study, a brief introduction about taxon, morphological descriptions, specimens examined, ecology and distribution of taxon have been provided for easy identification. The voucher specimens were deposited in the Herbarium (SP-HP-007), Centre for Biodiversity Studies, Baba Ghulam Shah Badshah University, Rajouri.

Pittosporum is a genus of about 200 species of flowering plants in the family Pittosporaceae. The genus is probably Gondwanan in origin; its present range extends from Australia, eastern Asia and some parts of Africa of which 12 species occur wild in India (Little et al., 1989).

Pittosporum is a small evergreen tree, upto 12 m in height, bark thin, light greenish grey; leaves loosely crowded towards the ends of the branches; lanceolate to elliptic oblong; flowers yellow; fragrant, much in branched corymbose or umbelliform clusters; capsules orange, slightly compressed; seed orange red, coated with a resinous, viscid fluid (Figure 2a and b).

Habitat

Very rare (on the basis of distribution), growing singly

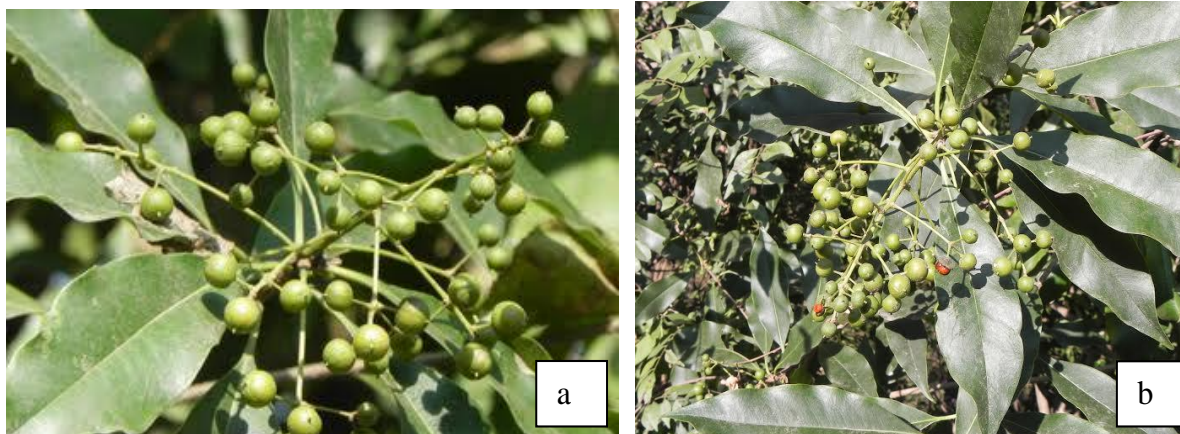


Figure 2. *Pittosporum eriocarpum* Royle with unripe (a) and ripe seeds (b) at Bhoranj Tehsil, District Hamirpur, Himachal Pradesh.

near the agricultural land along road side.

Specimens examined

Kangri, Dhamrol, 1145 m amsl, growing near the agricultural land along road side.

Distribution

North West Himalaya (Uttarakhand: Dehradun (around Kempty falls), Mussoorie hills and Jeullikot in Nainital district and Himachal: Chamba, Rissa Khad Watershed near Riwalsar, Mandi district).

Economic importance

It is classified as a multipurpose tree, and is lopped for fodder and fuel wood, and is a suitable species for soil conservation and reclamation of degraded sites.

Conflict of interests

The authors did not declare any conflict of interest.

ACKNOWLEDGEMENTS

Authors are highly thankful to the ACF, Hamirpur, Himachal Pradesh, India for providing the map of the study area.

REFERENCES

- Chowdhery HJ, Wadhwa BM (1984). Flora of Himachal Pradesh, Vol II. Botanical Survey of India, Calcutta.
- Devi T (2013). Floristic Diversity for the Socio-Economic Development of Rissa Khad Watershed in Central Himachal Pradesh, North Western Himalaya. Ph.D. Thesis submitted to Kumaun University Nainital.
- Kanjilal UN (1928). Forest flora of Chakrata, Dehradun, and Saharanpur Forest Division, Uttar Pradesh. 3rd Manager of Publications, Delhi.
- Little Jr, Elbert L, Roger GS (1989). Common Forest Trees of Hawaii (Native and Introduced). United States Forest Service. Retrieved 2010-02-07.
- Nayar MP, Shastri ARK (1987, 1988, 1990). Red Data Book of Indian Plants, Vol. I-III. Botanical Survey of India, Calcutta.
- Osmaston AE (1927). A Forest Flora for Kumoun (reprinted 1987). International Book Distributors, Dehradun.
- Padalia H, Bharti RR, Pundir YPS, Sharma KP (2010). Geospatial multiple logistic regressions approach for Habitat characterization of scarce plant population: a case study of *Pittosporum eriocarpum* Royle (an endemic species of Uttarakhand, India). Jour. Ind. Soc. Rem. Sen.: special issue on Biodiversity and Landscape Ecology, 38: 513- 521.
- Pundir YPS, Basera H, Padalia H (2001). Conservation and propagation of three endemic, endangered and rare plant species of Saharanpur-Sivaliks, Doon Valley and Lower Mussoorie forests. A project report submitted to G.B. Pant Institute of Himalayan Environment and Development, Almora.
- Singh D, Goel R (1999). *Pittosporum eriocarpum* (Pittosporaceae) - an endangered species with its new distribution record from Tehri district. Ann. For. 7(2): 185-191.
- World Conservation Monitoring Centre (1998). *Pittosporum eriocarpum*. In: IUCN 2008. IUCN Red List of Threatened Species.