



Seabuckthorn (*Hippophae* spp.) Conserve Plant Diversity in the Fragile Mountain Ecosystem of Cold Desert Himalaya

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ABSTRACT The present study signifies the importance of Seabuckthorn in conserving plant diversity in cold arid trans-Himalaya. Phytosociological surveys conducted in the Lahaul valley provide the estimation floral assemblage with Seabuckthorn (*Hippophae* spp.). In the survey, a total 148 plant species belonging to 43 families and 109 genera were noticed with a varied proportion of tree (11), shrub (10), herb (126) and fern (1) species. The vegetation parameters {(Shannon diversity (H') and Concentration Dominance (CD)} show an average contribution of tree and shrub species, while the contribution of herb species is surprisingly very high in comparison to the normal trend of the study areas. A 'hump shaped' diversity pattern in the altitudinal range varied from 3134 to 3254 m asl can be correlated with favorable environmental condition. Many plant species come in IUCN list of endangered plant species and their abundance was quite high in comparison to the other studies in the same area. The vegetation association shows a positive response to the ecological viability, making this species a good option for long term conservation strategy in cold desert Himalaya.