Improved agronomic package of practices of *Valeriana jatamansi* : An endangered valuable non timber forest product of high altitude

Dhiman Mukherjee

Received September 15, 2017 and Accepted December 2, 2017

ABSTRACT : *Valeriana jatamansi* Jones (syn. *V. wallichii*; family: Valerianaceae) one among the important medicinal plant species, is distributed in subtropical and temperate Himalaya. This is a very high value medicinal plant and day by day it become extricated from forest reservoirs. Local people and scientific community very little aware about its cultivation and propogation and economic value. Keeping this aspect, present study was conducted from 2010 to 2014 under the aegis of RRS, Kalimpong, Uttar Banga Krishi Viswavidayalaya to study details on improved crop management aspect for its cultivation and conservation. This prefers to grow under wide range of soil pH 4.5-5.7, with C:N ratio of 10.25 to 14.56. The plant can be grown in sandy loam soil, rich in carbon and humus. Sandy soils, containing concrete or coarse sand were favourable for the cultivation. Nearly, 11-13 months healthy and established seedlings are transplanted in the main field from perforated polybags with a spacing of 30 x 45 cm. Plant grows better in the edge of terraced land especially in the upper part. July-August was optimum time of transplanting. Work conducted under various shading option revealed that, rhizome yield was maximum registered with the 50% shading and statistically superior to other treatments except 75% shading. Shading upto 50% enhanced total crop biomass and significantly superior to all other treatments of shading. From commercial cultivation 1800 to 2000 kg of biomass collected from well management field. Approximately 2500kg of dry rhizome can be collected from one hectare of land. Good crop yield fetch higher net return (Rs. 80,002) and B:C ratio (2.42).

Key Words: Crop management, cultivation, endangered herb, high altitude, *Valeriana jatamansi*.