

Jatamansi

NARDOSTACHYS JATMANSI DC. FAMILY - VALERIANACEAE

It is an erect perennial herb, 10-60 cm in height, with woody, stout root-stock covered with reddish brown fibres of the petioles of radical leaves. Leaves radical, longitudinally nerved; flower pale-pink or blue. It is found in alpine Himalayas from 3,300-5000m.

COMMON NAMES: Mamsi, Jata Jatila, Balchara & Sumbul-ut-teeb

LOCATION: Hills of Himachal Pradesh, Uttaranchal, Jammu & Kashmir & Sikkim.

PART USED: Rhizome

CULTIVATION:

SOIL AND CLIMATE

Sandy loam and acidic soil rich in organic carbon and nitrogen was found best for germination as well as for better survival of seedlings and productivity. Moist and partial sunny areas are found suitable for cultivation. Further moist rough wall surface provide suitable microhabitat for better growth. At lower altitude (1800-2200m) plain beds with slight tilt (5-10⁰C) were found suitable for cultivation unlike horizontal and ertical beds at alpine site.

NURSERY RAISING AND PLANTING

Seeds are sown during November-December in polyhouse at lower altitude, during March-April in open beds at middle altitude and during May in alpine area. Seedlings are transplanted after six to eight weeks in the field. At lower altitude root growth as well as number and length of leaves increases rapidly as compared to higher elevation. However, fibrous root formation take place only after third year of growth when, plants are raised by seedlings. About 44,000 plants are planted in one acre of land.

Vegetative propagation through splitting of roots was found most successful in *Nardostachys jatamansi* and was observed better for multiplication as well as for higher production within short period than cultivation through seedlings.

MANURE AND FERTILISER

For cultivation, better survival and yield of Jatamansi at lower altitude (1800m) 60-70qs. manure is required for one acre of land. However, the results were found best in litter treatment instead of live stock manure. The sites rich in organic carbon needed 46-60 q litter manure per acre for higher yield.

IRRIGATION AND WEED CONTROL

Beds needed excessive watering/irrigation to decrease the mortality rate. Watering requirement will change in respect of different months like no irrigation is needed during monsoon period. Watering requirement also depends on the location of sites and texture of soil. During the dry season i.e. May-June and September-October watering must be done at every two days interval at lower altitude. Weeding also depends on the condition of soil and presence of weeds. Generally weeding must be done at weekly interval in the first year of seedling growth and during the second and third year twice in a month.

Harvesting/Post-harvesting

Plants should be harvested just before senescence after maturation to achieve the higher quantity of active contents. With a view to achieve higher amount of bio-active ingredients it must be collected during the months of September at lower altitude while in the months of October at higher altitude. The harvesting period for this species is 3-4 years, The harvested roots washed and dried in shade.

Yield

Production from mature stand from cultivation 12-13q /ha

ECONOMICS

The rate for a kg. of rhizome/root ranges from Rs. 100-150. (YEAR-2001)

NOTE: MARKET FOR MEDICINAL PLANTS IS VOLATILE AND THE ECONOMICS MAY VARY.

INSTITUTE TO BE CONTACTED:

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