



Research Note

Effect of bulky and concentrated organic manures yield and economics of safed musli (*Chlorophytum borivillianum*, sant. and fern.)

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Abstract : An investigation was carried out on loamy sand soil during *Kharif* season of the year 2008-09 to study the effect of bulky and concentrated organic manures yield and economics of Safed musli under semi-arid hot region at Anand. Application of vermicompost @ 2 t/ha along with *Azotobacter* gave significantly the higher fasciculated root yield (4444 kg/ha) which was at par with application of castor cake @ 1 t/ha either alone or along with *Azotobacter* and application of neem cake @ 750 kg/ha along with *Azotobacter*. Regarding economics of different treatments, treatment T₄ (vermicompost @ 2 t/ha+ *Azotobacter*) recorded maximum net realization, CBR and NCBR (Rs.1093418, 1: 5.5, 1: 4.5, respectively) followed by treatment T₆ and T₁₀ (Rs. 1000918, 1: 5.1 and 1: 4.1 and Rs.981698, 1: 5.1 and 1: 4.1, respectively). The lowest net realization, CBR, Net CBR was observed under treatment of T₁₁ (Rs.97138, 1: 1.4 and 1: 0.4, respectively).

Key Words : Safed musli, Organic manures, Fasciculated root yield

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Safed musli (*Chlorophytum borivillianum*) is an important endear medicinal plant with high demand. The fasciculated roots of safed musli have medicinal properties and used in Indian system of medicine. Fasciculated roots are used for the preparation of nutritive tonic used in general sexual weakness. The drug is considered as a valuable nerve and general tonic for strength and vigour. Safed musli have been named in Atherva veda as one of the devine herbs offering curve for many ailments and health related problems. Its demand is increasing rapidly in the international drug market. Foreign demand has been estimated as 300-700 tons annually. Its demand is over 35000 tons but supply about 5000 tons only. There is a need to

improve productivity of safed musli by adopting proper package of practices. With keeping in view the above consideration an experiment entitled as studies on effect of bulky and concentrated organic manures yield and economics of safed musli grown on lomy sand soil had been conducted in the field.

The field experiment was conducted at B. A. College of Agriculture, Anand Agriculture University, Anand (Gujarat), India during year 2008-09. Five organic manures *viz.*, FYM @ 5t/ha, vermicompost @ 2 t/ha, castor cake @ 1 t/ha, poultry manure @ 1 t/ha and neem cake @ 750 kg/ha alone or along with *Azotobacter* treatment were applied and these treatments were compared with control. Treatments were tested in Randomized Block Design with three replications. A new identified variety Anand Safed Musli-1 (ASM-1) was used. Fasciculated roots were planted in the June on beds. The gross plot size was 3.6m x 1.50 m for each treatment. Well written Farnyard manure, vermicompost, castor cake, neem cake, poultry manure were applied before planting and *Azotobacter* was applied as a root treatment by root dipping for 15-20 minutes. Uniform cultivation practices were

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