



RESEARCH PAPER

Single bud transplanting technique of turmeric to reduce production cost

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Abstract : Turmeric is one of the most important spice crops of Tamenglong district of Manipur. Due to high seed requirement (15-20 q/ha) of turmeric the cost of production increases rapidly. Around 40-45% of total cost of cultivation is incurred for procurement of seed and this is one of the major constraints for large scale cultivation of Turmeric. To overcome the disadvantages of conventional planting system of seed rhizomes and to produce good quality planting material with reduced cost, rapid multiplication of turmeric, single bud transplanting technology was introduced to the farmers of Noney/ Tamenglong district. ICAR – KVK Tamenglong organized different capacity building programmes on single bud transplanting of turmeric. Disease-free seed rhizomes of turmeric (variety Lakadong) were cut into small pieces of 5-6 g containing a single bud and treated with *Trichoderma viridae* @ 2g/litre and sown in pro-trays using suitable growing media prepared by mixing coco peat: FYM @ 1:1 during March. After 30-40 days, the germinated and well-developed seedlings were transplanted in main field. Single bud transplanting technique of turmeric produced healthy crop. Single bud transplanting technique of turmeric was recorded to have reduced number of days required for tillering (52 days) and rhizome development (207 days) whereas in conventional planting method it took 85 days for tillering and 237 days for rhizome development. Single bud transplanting technique of turmeric recorded a higher yield of 220 q/ha within a shorter period as compare to 170q/ha in conventional planting method. An average cost of production of Rs.45,600/ha was obtained under Single bud transplanting method as compare to Rs. 61000/ha under conventional planting method. Higher average net returns of Rs. 217200/ha and benefit cost ratio of 4.8:1 was recorded with single bud transplanting method. However, relatively lower average net returns of Rs. 143200/ha and benefit cost ratio of 2.3:1 was recorded with conventional planting method. An average cost saving of 34.2% was recorded with single bud transplanting method over conventional planting method.

Key Words : Turmeric, Rhizome, Single bud transplanting, On-farm trial

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