Effect of organic manures and biofertilizers on growth and yield of tomato (Solanum lycopersicum L.) cv. Narendra-6

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ABSTRACT: An experiment was undertaken to find out the effect of organic manures and biofertilizers on growth and yield of Tomato (*Solanum lycopersicum* L.) cv. Narendra-6. on their plant growth, yield and quality traits of fruit at Horticulture Research Farm, College of Agriculture, Tikamgarh (Madhya Pradesh) during the years 2012-13. It was concluded that Higher plant growth and fruit yield per hectare of tomato (*Solanum lycopersicum* L.) cv. Narendra-6 cultivars could be obtained, if these cultivars are grown with biofertilizer [PSB @ 2.5 kg /ha and Azospirillum @ 2.5 kg/ha] + RDF (NPK @ 60:50:30 kg/ha). The biofertilizers inoculation (PSB @ 2.5 kg /ha and Azospirillum @ 2.5 kg /ha) recorded maximum plant growth, yield and quality parameters of tomato as compared to without biofertilizers inoculation. But better fruit quality can be obtained with FYM 50% (@ 6 tonnes /ha) and vermicompost 50% (@ 3 tonnes /ha) with biofertilizers inoculation as compared to other treatments. The highest Cost Benefit ratio (1:3.45) obtained under the application of biofertilizer [PSB @ 2.5 kg/ha and Azospirillum @ 2.5 kg/ha] + RDF (NPK @ 60:50:30 kg/ha) as compared to other treatments.

Key Words: Organic manure, biofertilizer, tomato, growth and yield.