

## EFFECT OF INORGANIC FERTILIZERS, BIOFERTILIZERS AND ORGANICS ON GROWTH, YIELD AND ECONOMICS OF ONION (*ALLIUM CEPA* L.) CV. N-53

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**Abstract:** The present investigation entitled Effect of inorganic fertilizers, biofertilizers and organics on growth, yield and economics of onion (*Allium cepa* L.) cv.N-53 was conducted with the aim to understand the better utilization of nutrients for growth, yield and quality improvement of onion. A field experiment was conducted at the Department of Vegetable Science, College of Agriculture, Orissa University of Agriculture & Technology, Bhubaneswar (Odisha), during the *Rabi* season of the year 2012-13 under Randomized Block Design with ten treatments and three replications. The results revealed that the growth characters, like plant height, number of leaves per plant, leaf length, leaf width, dry weight of leaf and neck length; yield-attributing characters such as bulb weight, polar diameter and equatorial diameter of bulb were positively influenced under treatment T<sub>9</sub> i.e., Lime @ 0.2 LR + (*Azotobacter* + *Azospirillum* + P.S.B) @ 4 kg per ha each + Vermicompost @ 5t per ha + RDF (120:60:60 kg per ha), while no fertilizer was applied in control. Maximum bulb yield (27.13 t ha<sup>-1</sup>) was recorded in the same treatment (T<sub>9</sub>), which was due to the sum total effect of different growth and yield-attributing characters. Highest B:C ratio was found in treatment T<sub>7</sub> i.e., (Lime + Biofertilizers +RDF).

**Keywords:** Recommended dose of fertilizer, Vermicompost, Phosphobacteria, *Azotobacter*, Onion, Bulb yield, Economics

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