EFFECT OF DIFFERENT SOURCES OF NUTRIENTS ON GROWTH AND YIELD OF ONION (*ALLIUM CEPA* L.)

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Abstract: A field experiment was conducted during *Rabi* season 2016-17 to find out the effect of FYM and Vermi Compost with or without PSB and Azotobactor and rates of organic manures (50% and 100% RND) on growth attributes and yield parameters of onion (Agri Found Dark Red) on clay loam soil. The treatments comprised of organic, inorganic fertilizer and biofertilizers with ten treatments 100% RDF through inorganic, 100% RDF through FYM (N Basis), 100% RDF through vermicompost,50% RDF through Inorganic Fertilizers + 50 % through FYM, 50% RDF through Inorganic Fertilizers + 50 % through vermicompost, 5 0% RDF through Inorganic Fertilizers + 50 % through FYM + PSB, 50% RDF through Inorganic Fertilizers + 50 % through vermicompost + PSB, 50% RDF through Inorganic Fertilizers + 25 % vermicompost + PSB, 100% RDF through FYM (N Basis) + PSB + *Azotobactor* and 100% RDF through vermicompost + PSB + *Azotobactor*. Results revealed that the application of organic manure significantly influenced the plant height (cm), number of leaves, fresh weight of leaves (g plant^{-1}) and dry weight of leaves (g plant^{-1}) with 100% RDF through Vermicompost + PSB + *Azotobactor* at 30 and 60 days of transplanting. The diameter of bulb (cm), bulb weight (g) and bulb yield (q ha^{-1}) significantly increased with 100% RDF through Vermicompost + PSB + *Azotobactor*).

Keyword: Growth, Onion, Nutrient, Yield

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