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Study of Physiochemical Properties of Experimental Soil and Effect of Integrated Nutrient Management on Physical and Chemical Properties of Soil while harvesting of *Phaseolus Vulgaris*

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Abstract: *As world population increases as day by day and to fulfill the need of food commodities, it is need to be applying the integral practices to enhance the soil fertility by improving the physical and chemical properties. In present study was done on, 'Effect of Integrated Nutrient Management on Physical and Chemical Properties of Soil'. A field experiment was conducted in rabi 2005-2006 on experimental farm of department of ACSS, MAU, Parbhani to study, "Integrated nutrient management for* ***Phaseolus Vulgaris*** *(Rajma).Lowest bulk density of soil was observed due to application of only vermicompost. Wherever the highest bulk density was observed when only inorganic fertilizers were applied. Maximum water holding capacity of soil and porosity was recorded where vermicompost @ 5 tonnes ha^{-1} only was applied. Maximum water holding capacity was where 5 tonnes of vermicompost ha^{-1} with biofertilizers were applied. Maximum water holding capacity may be due to high organic carbon content resulting in soil aggregation. While these characters of soil were recorded minimum when only inorganic fertilizers were applied. The minimum porosity i.e., 48.60 per cent was recorded where 150% RDF of NPK/ha was applied through inorganic fertilizers. Soil pH and EC where highest only inorganic fertilizers were applied. The lowest pH and EC were recorded due to use of vermicompost only. The per cent organic carbon was highest in the soil where only vermicompost was applied only, whereas the lowest organic carbon was observed due to application of inorganic fertilizers.*

Keywords: Phaseolus Vulgaris, Bulk density, pH, EC**.**

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