RESEARCH ARTICLE

EFFECT OF ORGANIC MATTER AND SOIL-MICROBIAL COMMUNITY ON PHYSICAL, CHEMICAL AND BIOLOGICAL PROPERTIES OF SOIL

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Abstract: A field experiment was conducted at Varanasi, Uttar Pradesh during rainy (*kharif*), winter (*rabi*) and summer (*zaid*) season of 2004 and 2005 to find out the effect of various sources (farmyard manure, vermicompost and poultry manure) and rates of organic manures (100%, 125%, 150% RND) on yield, quality and economics of scented rice on a sandy clay-loam soil low in available N and medium in available phosphorus and potassium. Pooled data analysis revealed that the application of organic manure significantly influenced the yield attributes and grain yield of rice over 100% RND as urea (control). Progressive increase in dose of all the organic manures significantly increased the organic matter, soil microbial population, physical, chemical and biological properties of soil.

Keywords: Origin matter, Physical, Chemical, Biological, Soil

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