

Effect of IPNM practices on yield and quality of crop in rice linseed-system

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ABSTRACT : Microplot (1×1m) trials were conducted to study the effect of 100% and 125% RDF of NPK along with 60 kg sulphur and 5kg zinc, city compost and vermicompost in different combinations during year 2012-13 on rice-linseed cropping system, where in the nutrient sources were applied in rice and linseed was allowed to grow on residual fertility with an uniform dose of 60 kg N/ha. The results revealed that application of 125% RDF of NPK (187.5, 93.7, 93.7 kg/ha, respectively) along with 1.2 t vermicompost gave the highest yield of rice variety NDR-359 (60.11 and 85.45 q/ha, respectively) of grain and straw. The same treatment gave the highest yields in linseed variety Neelam (14.55 and 33.92 q/ha of seed and stover yield, respectively). The above IPNM practice also increased the protein content to 9.90% as compared to 8.35% in control in rice. Protein content in linseed seed was maximum in the same treatment (20.70%) and the oil was maximum (42.44%) in the treatment 100% RDF NPK +40kg S and 5kg Zn/ha. Soil analysis after the harvest of rice did not show any change in physico-chemical properties showing the validity of utilization of residual fertility. The yields of protein and oil were as a function of grain/seed yields of rice and linseed.

Key Words: RDF, sulphur, zinc, city compost, vermicompost, IPNM, rice-linseed