EFFECT ON PRODUCTION AND PROFITABILITY OF HYBRID RICE (ORYZA SATIVA L.) THROUGH NUTRIENT MANAGEMENT PRACTICES


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Abstract: The field experiment was conducted at Research-cum-instructional farm of Raj Mohini Devi College of Agriculture and Research Station, Ajirma, Ambikapur, Chhattisgarh during kharif 2018 to study the effect of “Effect on production and profitability of hybrid rice (Oryza sativa L.) through nutrient management practices”. The experiment was laid out with 02 hybrid rice varieties as main plot (V₁: IRH-103, V₂: IRH-111.) and 05 nutrient management practices as sub plot T₁- 100% RDF (Standard check), T₂- 75% RDF through inorganic and organic {Topdressing of (Vermicompost @2q/ha+ DAP@ 25kg/ha) at 25-30 DAT and remaining NPK through inorganic}, T₃- 100% RDF through inorganic and organic {Topdressing of (vermicompost @2q/ha+ DAP@ 25 kg/ha) at 25-30 DAT and remaining NPK through inorganic}, T₄- 150% RDF through inorganic and organic {Topdressing of (Vermicompost @2q/ha+ DAP@ 25 kg/ha) at 25-30 DAT and remaining NPK through inorganic}, T₅- 150% RDF in split plot design with four replications. The result revealed that hybrid rice variety IRH-103 on significantly higher grain yield (67.98q/ha), HI% (48.26 %) and test weight (24.21g) comprised to IRH-111. Among the nutrient management practices were significantly higher grain yield (65.11 q/ha), HI% (44.23 %) and test weight (24.46 g) on 150% RDF through inorganic and organic {Topdressing of (Vermicompost @2q/ha+ DAP@ 25 kg/ha) at 25-30 DAT and remaining NPK through inorganic} and statistically at par with 150% RDF through inorganic. In case of monetary higher gross return (184697.76`/ha), net return (138771.78`/ha) and B: C ratio (3.02) were also observed in hybrid rice variety IRH-103 than IRH-111 and nutrient management practices application of 150% RDF through inorganic and organic {Topdressing of (Vermicompost @2q/ha+ DAP@ 25 kg/ha) at 25-30 DAT and remaining NPK through inorganic} recorded significantly higher gross return (177034.36`/ha), net return (129526.86`/ha) and B: C ratio (2.73) and which was on par with 150% RDF through inorganic.

Keywords: Hybrid, Nutrient, Management practices, Rice

REFERENCES


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