SHORT COMMUNICATION

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

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Received-03.01.2020, Revised-25.01.2020

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 (V_1: IRH-103, V_2: IRH-111.) and 05 nutrient management practices as sub plot T_1- 100% RDF (Standard check),T_2- 75% RDF through inorganic and organic {Topdressing of (Vermicompost @2q/ha+ DAP@ 25kg/ha) at 25-30 DAT and remaining NPK through inorganic},T_3- 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},T_5- 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

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