

EFFECT OF NUTRIENT BLENDING WITH FYM ON BIOMASS PRODUCTION AND ECONOMICS UNDER HYBRID COTTON-SOYBEAN INTERCROPPING SYSTEM

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Abstract: The field experiment was conducted during *kharif* season of 2004 and 2005 at the Instructional Farm, Indira Gandhi Agricultural University, Raipur (C.G.) to study the effect of nutrient blending with FYM and intercropping on biomass production and economics of hybrid cotton - soybean intercrops under irrigated condition. The growth characters of cotton like-plant height, number of branches, number of leaves, dry matter accumulation, LAI, CGR, and RGR were the highest with sole cotton with 100% RDF. In case of soybean, the growth parameters like-plant height, number of branches, number of leaves, dry matter accumulation, LAI, CGR, and RGR were the highest under sole soybean with 100% RDF. The bolls per plant in cotton were the highest under sole cotton with 100% RDF. Similar trend for yield components were observed in case of soybean. Sole cotton with 100% RDF resulted in maximum seed cotton and stalk yield as compared to other intercropping treatments. Similar trend was also noted with sole soybean with 100% RDF, which recorded significantly the highest seed and stover yield as compared to others. The maximum values of LER, cotton equivalent yield, monetary advantage gross realization, net realization ha^{-1} and B: C ratio were recorded under C+S (2:4) + 100%RDF, which was closely followed by treatment C+S (2:4) + 1 t FYM ha^{-1} + 75% RDF (BL).

Key words: Nutrient blending, Intercropping, Biomass production, Economics, Hybrid cotton, Soybean.

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