YIELD AND PROFIT OF SOYBEAN (*GLYCINE MAX* L. MERRILL) AS INFLUENCED BY INTEGRATED NUTRIENT MANAGEMENT UNDER *VERTISOLS* OF CHHATTISGARH PLAINS

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Abstract: A field experiment was conducted in *kharif* season of 2009 at the Instructional Farm, Indira Gandhi Krishi Vishwavidyalya, Raipur to study the "Productivity and profitability of soybean (*Glycine max* L. Merrill) as influenced by integrated nutrient management practices under *Vertisols* of Chhattisgarh plains". The application of recommonded level of organic and inorganic fertilizers with biofertilizer showed the superiority for plant height, number of leaves, number of branches, dry matter accumulation, leaf area and yield attributes viz. pods per plant, seeds per pods, seeds per plant and 100 seed weight. The combine application of 20:60:40 kg NPK ha^{-1} + 5 t FYM ha^{-1} + Zn 5 kg ha^{-1} + Mg 5kg ha^{-1} + *Rhizobium* + PSB were recorded highest yield (21.41 q ha^{-1}) and economic net return (15226.89 Rs ha^{-1}) however the benefit: cost ratio (1.55%) was recorded maximum with the application of recommended dose of NPK (20:60:40 kg ha^{-1}, respectively). Soil physico-chemical and biological properties as well as nutrient status in the soil were also improved. The Nutrient content in soil after harvest of the crop was found 260:20:320 kg NPK ha^{-1} respectively and 0.75% organic content higher over control.

Keywords: Yield, Soyabean, Crops, Chhattisgarh

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