RESPONSE OF GENOTYPES AND GROWTH REGULATORS ON NUTRIENT UPTAKE, ECONOMICS AND ENERGY OUT-PUT OF PIGEONPEA (CAJANUS CAJAN (L.) MILLSP) IN VERTISOLS OF CHHATTISGARH PLAINS

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Abstract: In Chhattisgarh, pigeonpea occupies an area of 164.72 m ha with a production of 85.69 m t and productivity of 520 k g ha⁻¹. Present study was undertaken to assess the effect of genotypes and growth regulators on nutrient uptake, economics and energy output of pigeonpea in Vertisols of Chhattisgarh plains. Field experiment was conducted during kharif (rainy) season of 2000-01 at IGKV, Raipur on Vertisols having pH 7.19 with available N 218, P 12.15 and K 363 k gha⁻¹. The N and K uptake were found to be higher in cv. Asha, even though their concentration was low; it is due to higher biological yield of cv. Asha. As regards to economics comparison of both cultivars, the gross and net realization estimated to be significantly higher in cv. Asha than cv. C-11. Highest seed protein content was observed in 2,4-D, which is corroborates the findings of Borriobera et al. (1995). Protein yield was found to be highest in cycocel and 2,4-D for seed and stalk respectively. Economics of pigeonpea production was influenced by growth regulators. Highest gross and net realization were found in cycocel treatment.

Keywords: Growth regulators, Economics, Nutrient uptake

REFERENCES


