

Production Potential and Economic Returns of Bed Planted Chickpea (*Cicer arietinum* L.) As Influenced by Different Intercropping Systems

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Abstract : A field experiment was carried out during the rabi season of 2017 and 2018 to evaluate the productivity and economic viability of bed-planted chickpea-based intercropping systems. The experiment was laid out in a randomized block design consisting of four replications with thirteen treatments. Results showed that sole chickpea recorded the highest seed yield, and it was statistically at par with seed yield obtained under chickpea + oats fodder (2:1), chickpea + oats fodder (4:1), and chickpea + linseed (4:1) intercropping systems. However, oilseed rape and barley as intercrops showed an adverse effect on yield and yield attributes of chickpea. Chickpea + oats fodder in 2:1 row ratio recorded the highest chickpea equivalent yield of 24.07 and 24.77 q/ha during 2017 and 2018, respectively. Higher net returns (Rs. 63098 and 70924/ha) and benefit-cost ratio (1.47 and 1.63) were also recorded in chickpea + oats fodder (2:1) intercropping system over sole chickpea (Rs. 44862 and 53769/ha and 1.21 and 1.41) during both the years. Chickpea + oats fodder (4:1), chickpea + linseed (2:1), and chickpea + linseed (4:1) also recorded significantly higher chickpea equivalent yield, net returns, and benefit-cost ratio as compared to sole chickpea.

Keywords : bed planted chickpea, chickpea equivalent yield, economic returns, intercropping system, productivity

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