



Effect of Spacing and Fertility Levels on Growth, Yield and Economics of Green Gram (*Vigna radiata* L) under Rainfed Conditions

S.K. Sharma, Kuldeep Singh, Kautilya Chaudhary and S.K. Thakral

Department of Agronomy
Chaudhary Charan Singh Haryana Agricultural University, Hisar-125 004, India
E-mail: sksharma67@rediffmail.com

Abstract: Field experiments were conducted at CCS Haryana Agricultural University, Hisar during *Kharif* season of 2018 and 2019 to study the effect of spacing and fertility levels on growth, yield parameters, yield and economics of green gram. The experiment was laid out in factorial randomized block design with 3 spacings viz. S₁: 22.5 × 10 cm, S₂: 30 × 10 cm and S₃: 45 × 10 cm and 3 fertility levels viz. F₁: 100 % RDF (20-40 kg NP ha⁻¹), F₂: 125 % RDF (25-50 kg NP ha⁻¹) and F₃: 150 % RDF (30-60 kg NP ha⁻¹). Green gram sown at spacing of 45 × 10 cm registered significantly higher seed yield (824 kg ha⁻¹), yield attributing parameters, RWUE (5.29 kg ha⁻¹ -mm), net returns (Rs 39940 ha⁻¹) and BC ratio (3.10) compared to other spacings during *Kharif* season. Application of 100 % recommended dose of fertilizers (20-40 kg NP ha⁻¹) recorded significantly higher seed yield (748 kg ha⁻¹), yield attributing parameters, rain water use efficiency (4.85 kg ha⁻¹ -mm), net returns (Rs 34461 ha⁻¹) and BC ratio (2.80) compared to 125 and 150 % recommended dose of fertilizers.

Keywords: BC ratio, Fertility levels, Green gram, Net returns, Spacings, Seed yield
