

Impact of foliar fertilization on growth and yield of *rabi* greengram (*Vigna radiata* L.)

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ABSTRACT

A field experiment was conducted during the *rabi*, 2023–24 and 2024–25 at J Farm, Agricultural Research Institute, PJTAU, Rajendranagar, to evaluate the impact of different foliar nutrient sprays on the growth and yield attributes of greengram (*Vigna radiata* L.). Results revealed that application of recommended dose of fertilizer & foliar spray of 19:19:19 @ 0.5 % at 20 & 40 DAS significantly enhanced growth parameters including plant height (55.31 cm), number of branches (4.75), number of trifoliate leaves (8.55) and dry matter accumulation plant⁻¹ (11.36 g); yield attributes such as number of pods plant⁻¹ (17.17), number of seeds pod⁻¹ (11.33) and pod length (8.86 cm), seed yield (1490.74 kg ha⁻¹), haulm yield (3144.01 kg ha⁻¹), harvest index (32.16) and benefit-cost ratio (2.36 BCR). This treatment was statistically at par with T₅ (RDF + foliar spray of DAP @ 2% at 20 & 40 DAS). The lowest values for growth, yield attributes and seed yield were obtained in the control treatment (T₁), which did not receive any RDF or foliar spray. The study underscored the efficacy of foliar application of balanced nutrients, particularly 19:19:19, in improving the productivity and profitability of greengram cultivation under *rabi* conditions.

Keywords: *Foliar spray, Greengram, Nutrients and Recommended dose of fertilizer*