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RESEARCH PAPER

Effect of vermicompost and zinc on yield attributes, yield and quality of green gram [Vigna radiata var. aureus (L.) wilczek] in arid western Rajasthan

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Abstract : A field experiment was conducted during Kharif season to find out the Response of green gram [Vigna radiata var. aureus (L.) wilczek] to vermicompost and zinc application in arid western Rajasthan. The treatments comprised of five organic manure (Control, FYM @ 10 tha⁻¹, vermicompost @ 5 tha⁻¹, vermicompost @ 7.5 tha⁻¹ and vermicompost @ 10 tha⁻¹) and four spray of zinc sulphate (control, at initiation of branching, at initiation of flowering and at initiation of branching as well as flowering) were laid out in randomized block design. Application of increasing levels of vermicompost from 5 to 7.5 t ha⁻¹ significantly enhanced the pods per plant, pod length, grains per pod, test weight, grain yield, straw yield, biological yield, harvest index, NPK and Zn, content in seed and straw and protein content in seed of green gram. Further an application of foliar spray of zinc at both branching and flowering stage in green gram significantly increased the pods per plant, pod length, grains per pod, test weight, grain yield, straw yield, biological yield, harvest index, NPK and Zn, content in seed and straw and protein content in seed of green gram as compared to single application of foliar spray of zinc at branching as well as flowering and control.

Key Words : Green gram, Organic manure, Zinc, Yield attributes, Yield, Quality

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