

**RESEARCH ARTICLE :**

## Effect of plant density, nitrogen and phosphorus level on yield attributing characters of cowpea (*Vigna unguiculata* (L.) Walp)

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**SUMMARY :** Cowpea is a popular grain legume which is grown as vegetable and fodder. It can be grown successfully during monsoon and summer. Being rich sources of proteins, vitamins and minerals for the predominantly vegetarian population and are popularly known as “Poor man’s meat” and “rich man’s vegetable” (Singh and Singh, 1992). This investigation was conducted at the Vegetable Research Farm Department of Horticulture, R.A.K. College of Agriculture, Sehore, under Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya, Gwalior (M.P.) during the *khariif* season of 2011-2012. The experiment was aimed to find out specific plant density, nitrogen and phosphorus level. The experiment consisted of three plant densities *viz.* D<sub>1</sub> (60 x 10 cm), D<sub>2</sub> (60 x 15 cm) and D<sub>3</sub> (60 x 20 cm), three nitrogen levels *viz.* N<sub>0</sub> (0 kg/ha), N<sub>1</sub> (20 kg/ha) and N<sub>2</sub> (40 kg/ha) and three phosphorus levels *viz.* P<sub>0</sub> (0 kg/ha), P<sub>1</sub> (40 kg/ha) and P<sub>2</sub> (80 kg/ha) with three replication and Randomized Block Design (RBD). The significant findings of the investigations are highlighted as under plant density, nitrogen and phosphorus level on different yield characters *viz.* first flower flush (50%), number of cluster per plant, flowers per plant, pod per plant, pod per plant, seed per pod, seed index, pod length, seed yield per ha, protein content and net profit.

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