## Effect of Nitrogen and Phosphorus on Growth and Yield of Clusterbean (*Cyamopsis tetragonoloba* (L.) Taubert) in Sandy Loam Soils of Andhra Pradesh

K Priyanka, E Narayana, B Venkateswarulu, G V Lakshmi Department of Agronomy, Agricultural College, Bapatla – 522101

## **ABSTRACT**

A field experiment was conducted during *kharif* 2013 at Agricultural College, Bapatla to study the effect of nitrogen and phosphorus on growth and yield of clusterbean. The experiment was laid out in Randomized block design with factorial concept, replicated thrice with four nitrogen levels *viz.*,  $N_1$ -*Rhizobium* inoculation alone,  $N_2$  - 20 kg N ha<sup>-1</sup>,  $N_3$  -20 kg N ha<sup>-1</sup> + *Rhizobium*, and  $N_4$  -40 kg N ha<sup>-1</sup> and three phosphorus levels *viz.*,  $P_1$  - 30 kg  $P_2O_5$  ha<sup>-1</sup>,  $P_2$  - 60 kg  $P_2O_5$  ha<sup>-1</sup>,  $P_3$  - 30 kg  $P_2O_5$  ha<sup>-1</sup> + PSB. The results showed that nitrogen level of  $N_3$  -20 kg N ha<sup>-1</sup> + *Rhizobium* and phosphorus level  $P_3$  - 30 kg  $P_2O_5$  ha<sup>-1</sup> + PSB significantly influenced growth characters, yield attributes, yield and economics of clusterbean.

**Key words:** Clusterbean, Growth, Nitrogen, Phosphorus.