

# **Effect of Zinc on Blackgram in Rice- Blackgram Cropping System in Coastal Saline Soils**

**B Peda Babu, M Shanti, B Rajendra Prasad and P S Minhas**

Saline Water Scheme, Agricultural College Farm, Bapatla-522 101, Andhra Pradesh

## **ABSTRACT**

A field experiment was conducted during kharif and rabi 2002-2003 on a saline soil, that is low in available Zn and N, medium and high in available P and K, respectively, to study the effect of various levels of Zn, method of application and residual effect of Zn on yield, nutrient concentration and nutrient uptake in blackgram. The maximum grain and hull yields of blackgram were recorded with treatment T6 (25 kg ZnSO<sub>4</sub> ha<sup>-1</sup> to blackgram). Foliar treatments at different stages of blackgram were also compared. The treatments T2, T3 and T4 that received ZnSO<sub>4</sub> through soil applications in previous crop of rice recorded low yield compared to direct application. The nutrient status of soil at the end of rice-blackgram cropping sequence indicated that the available N, P and Zn status of soil increased and that of K was found to decrease when compared with the initial soil status.

**key words:** Rice-blackgram cropping system, Saline soils, Zinc .