

## **Effect of Long Term Application of Manure and Fertilizers on Soil Available Secondary Nutrients in Alfisol of Groundnut**

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### **ABSTRACT**

The status of nutrients- their depletion and build-up in soil and crop productivity after thirty years (1981-2010) of intensive cropping were studied under continuous use of various inorganic fertilizers and organic manure in an Alfisol. Results showed that application of NPK (20:10:25 kg ha<sup>-1</sup>) + gypsum +ZnSO<sub>4</sub> resulted in pod yield of 828 kg ha<sup>-1</sup> of pod while FYM treatment plot produced 774 kg ha<sup>-1</sup> of pod yield. However the fertility of soil appears to be adversely affected due to the imbalanced use of macronutrients. The secondary nutrient calcium was applied through Lime or gypsum. Thus, the balanced use of fertilizers continuously either alone or in combination with organic manure is necessary for sustaining soil fertility and productivity of crops.

**Key words :** Groundnut, Long term fertilization, Secondary nutrients.