INFLUENCE OF DIFFERENT PACKAGES OF PRACTICES ON GROUNDNUT YIELD IN SANDY REGOSOL OF EASTERN REGION IN SRI LANKA

By

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ABSTRACT

A study was conducted to test the influence of two groundnut production technologies namely recommendations of the Department of Agriculture (DOA) and Improved Groundnut Production technology of India and China (IGP) in sandy regosols at the Eastern University farm Chenkalady, Eastern province, during the period of June to September 2002. Six treatments, including two packages of practices, were arranged in a Randomised Complete Block Design (RCBD) with four replicates. Groundnut variety-Indi, recommended by the Department of Agriculture, was used in this study.

The packages of Improved Groundnut Production technologies in India and China consisted of application of Gypsum, application of $ZnSO_4$, seed treatment with Thiram and Removal of Earth from Around the Seedling (REFAS).

The influence of Improved Groundnut Production technologies (IGP) was found to be superior over the DOA package of practices in sandy regosols. The IGP produced higher biomass, pod yield, pod size, 100-kernel weight, oil-content and shelling percentage compared to the DOA package. At the same time DAO package show low values to most of the parameters. The yield of IGP was 57% higher when compared to DOA package of practices.

The study concludes that by the applications of Gypsum at the rate of 450 Kg / ha, seed treatment with 3 g / Kg of Thiram and an agronomic practice called REFAS (Removal of Earth from Around the Seedling) as adopted in china can increase yield of ground nut production than the technology recommended by the Department of Agriculture in the sandy regosol of the Eastern province.