B203

Efficieny of levels and frequency of nitrogen application on growth and yield of groundnut (Arachis hypogea L) in the regosols

This investigation was conducted in order to study the effect of levels and frequency of nitrogen application on the growth and yield of groundnut in the regosols during the period of January to April 1995 at the Eastern University, Vantharumoolai, Sri Lanka.

Five levels of nitrogen (0.15,30,45 and 60kg/ha was made as basal dressing. Topdressing at the rate of 15,30 and 45kg N/ha was done either as a single application or in two split doses. Increasing levels of nitrogen from 0 to 60 kg/ha increased dey matter accumulation in vegetative parts (stem and leaves) at all stages of growth, especially when the topdressing was done in two split doses.

Leaf area increased as nitrogen level increased and more so when applied in split doses. The effect of nitrogen applied appeared to be more pronounced during the early stage of growth (60 Days After Planting) than that in the later stage of growth (90 Days After Planting). Effect of levels of nitrogen or of splitting the topdressing in two applications on pod dry wietht, pod number and fresh pod yield, pod dry weight and pod number. There was no significant effect of levels of nitrogen or number of application on shelling percentage except that on shelling percentage at 60kg/ha of Nitrogen applied in two split doses. The hundred kernel weight in plots which received nitrogen was significantly higher than that in plot which received no nitrogen (control).