

FORMS, LEVELS AND FREQUENCY OF APPLICATION
OF NITROGENOUS FERTILIZERS
FOR SOYBEANS
(Glycine max. L.)

BY
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A RESEARCH REPORT

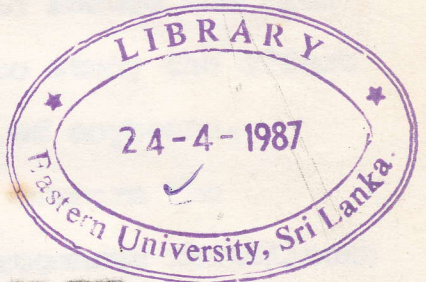
SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS OF THE ADVANCED COURSE IN
SOIL CHEMISTRY (504 e)

FOR THE DEGREE
OF

BACHELOR OF SCIENCE IN AGRICULTURE

EASTERN UNIVERSITY, SRI LANKA

1986



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ABSTRACT

The nitrogen requirement of soybean is very high. Although a large portion of this nitrogen can be obtained from atmosphere through its symbiotic relationship with *Rhizobium japonicum*, a certain amount of soil nitrogen is necessary for its initial growth. Since one heavy application of fertilizer nitrogen would reduce the rate of nitrogen fixation, it was intended to study the effect of frequent light applications on yield of soybeans. Another objective of this study was to compare the efficiencies of different forms of nitrogenous fertilizers in regosols.

Accordingly, a field experiment was designed and conducted at the Eastern University Farm to achieve such objectives. Urea and ammonium sulphate at four different combinations of level and frequency were tried in the experiment.

The results of this study showed that although heavy application of basal nitrogen favourably affected the growth and development of plants, the seed yield of soybeans was increased largely due to frequent light applications. The highest seed yield of 2420 kg/ha in this study was obtained when nitrogen was given as 20 kg/ha of basal and 10 kg/ha of top dressing. The results also indicated that urea was more effective than ammonium sulphate in regosols.

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