## EFFECT OF INCORPORATION OF ORGANIC MANURES ON SOME PROPERTIES OF REGOSOLS

BY

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A RESEARCH PROJECT

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.

1987

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## ABSTRACT

Since the organic matter content of our soils declines rapidly under continuous cultivation of crops, it is deemed necessary to endeavour the utilization of all possible agricultural wastes as organic manures.

An incubation experiment was, therefore, conducted in the laboratory of the Division of Agricultural Chemistry, Eastern University in order to investigate the effect of incorporation of cowdung, glyciridia, paddy husk and coir dust on some soil properties such as water holding capacity, cation exchange capacity and C:N ratio in regosols of the Eastern Province. The rate of release of available nitrogen was also studied.

The results of this study indicated that all the tested organic manures increased the water holding capacity and cation exchange capacity of the soil by increasing the organic matter content. Cowdung and glyciridia were much better than coir dust and paddy husk. The C:N ratio of the soil increased significantly on the application of organic manures but as the decomposition proceeded, decreased gradually depending on the material added. The addition of organic manures caused a depression of available nitrogen, and the depression depended on C:N ratio of the materials. The wider the ratio, the longer was the depression period.

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