

STUDIES ON THE EFFECT OF A FUNGICIDE AND TWO GREEN LEAF
SOIL AMENDMENTS ON THE RHIZOSPHERE AND NONRHIZOSPHERE
FLORA OF OKRA

BY

M. M. RAZEEN

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K. Nithiantharajah

(SUPERVISOR)

Mr. K. Nithiantharajah
Division of Agric. Biology,
Department of Agronomy,
Batticaloa University College

Dr. S. Sandanam
12/9/86

(Head of the Dept.)

Dr. S. Sandanam
Department of Agronomy,
Faculty of Agriculture
Batticaloa University College,

12

18418

ABSTRACT

In Sri Lanka, specially in the north farmers have been extensively using the green leaves of Thespesia populnea, Calatorpis gigantea, Tephrosia purpurea, T. candida, Crotolaria juncea, Azadiracta indica and Tamarindus indica as green manure to improve soil fertility and plant growth.

Leaf amendments, pesticidal chemicals and the root exudates of plants affects the saprophytic and Pathogenic soil microbial populations.

Soil was treated in this experiment with leaves of Neem (Azadiracta indica) and Thespesia populnea and a fungicide Morut (Fenaminsulf 10% and Pentachloro nitrobenzene 70%). With and without Okra seeds to study the changes on the mycoflora.

Neem leaf controlled the population of the Rhizosphere fungi till the 32nd day after treatment and it controlled the fungi only up to the 15th day in the non rhizosphere soil. Also Neem retarded the growth of the plant when compared to other treatments.

Thespesia leaves increased the fungal population throughout the study in both the Rhizosphere and the nonrhizosphere soil and increase the growth of Okra more than in other treatments.

The fungicide Morut controlled both the non rhizosphere and the rhizosphere fungal population till the 8th day and showed increased population during the next two weeks and became equal to that of control afterwards.

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