ISBN: 978-955-1443-53-5 BAR CODE: 9 789551 443535

Proceedings of the Seventh Annual Research Session 2008



Eastern University, Sri Lanka Vantharumoolai, Chenkalady Sri Lanka BUSL

HBH.

INFLUENCE OF REMOVAL OF SHOOT TIPS ON BIOMASS PRODUCTION OF GREENGRAM (Vigna radiata L.)

oo**m**

hisil,

A. Krishanthy, T. H. Seran

Department of Crop Science, Faculty of Agriculture, Eastern University, Sri Lanka

ABSTRACT

Greengram is one of the important pulse crops grown and consumed mostly in developing countries. Human consumption of greengram is as dry seeds. Crop residue is also important feed resource for ruminants and has potential as a green manure. Specific cultural practices normally carry out to achieve maximum biological yield in legumes and other crops. Therefore, an attempt was made to study the effect of removal of shoot tips of greengram (Vigna radiata L.) on biomass production. This experiment was laid out in a Randomized Complete Block Design with five treatments and four replications. Treatments included removal of apical portions of main stems at 3rd, 4th, 5th and 6th weeks after planting of greengram cv. MI 5 and also unremoval of apical portion used as control. Plant height, number of leaves, number of branches and leaf area were recorded at regular intervals to evaluate the effect of decapitation on biological yield of greengram. Fresh and dry weights of plant were measured after harvesting of pods. The results showed that there was significant difference in number of branches among the treatments. Removal of apical portions at 3rd and 4th weeks significantly differed from other treatments in number of leaves, leaf area fresh and dry weights of plant. T, gave significantly high economic (162.85 kg per plot) and biological (405.75 kg per plot) yields among the treatment except T₂. The most effective stage of vegetative growth to remove the shoot tips to obtain high production of biomass in greengram grown in sandy regosol is the 3rd week of planting.

Key words: Biomass, Decapitation, Greengram,

INTRODUCTION

Greengram is one of the important pulse crops grown world wide. It is primarily for its protein rich edible seeds and also has potential as agreen manure and a forage crop. Its short duration, low water requirements,

neal.

1/4.

dant 174.

ally