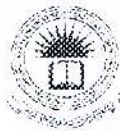


**POTENTIAL OF BIOFILM BIOFERTILIZER FOR OKRA  
(*Abelmoschus esculentus*) AND AMARANTHUS (*Amaranthus viridis*)  
IN EASTERN REGION**



**BY  
CHANUKA PRABUDDHA HETTIARACHCHI**



FAG597



Library,  
Eastern University, Sri Lanka

**FACULTY OF AGRICULTURE  
EASTERN UNIVERSITY  
SRILANKA**

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## ABSTRACT

Biofilms are aggregates of multiple microbial communities, attached to each other or to a surface. In vitro developed beneficial biofilms can be used as biofertilizers, which are then called biofilm biofertilizer (BFBF). Therefore, this study was conducted to evaluate the effect of BFBF on growth, yield of okra and amaranthus in eastern region, in comparison with fertilizer recommendation of the Department of Agriculture and farmer practice at eastern region. Eight different treatments consisted of different levels of chemical fertilizers alone and their combination with BFBF and a control were replicated four times in Complete Randomize Design. Plant and soil parameters were recorded periodically and data were statistically analysed using SAS and difference between treatments means was compared using Duncan's Multiple Range Test (DMRT). Treatments with the application of BFBF showed increasing trend of soil organic matter content, pod formation in okra and plant biomass in amaranthus. Combination of 50% recommended chemical fertilizers with BBs can be recommended for Okra & Amarabthus cultivation in eastern region.

Key words: Biofilm, vegetable yield, microbial functions

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