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PERFORMANCE OF BROCCOLI (*Brassica oleracea*) GROWN IN
POLYETHYLENE BAGS UNDER DIFFERENT
SHADING MATERIALS

Research Study

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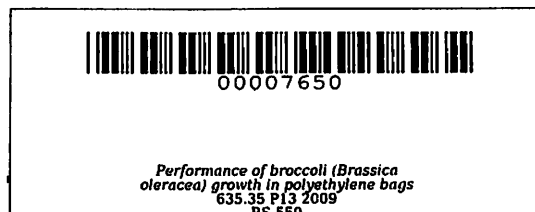
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**PERFORMANCE OF BROCCOLI (*Brassica oleracea*) GROWN IN
POLYETHYLENE BAGS UNDER DIFFERENT
SHADING MATERIALS**

A Research Study Submitted to the Faculty of the
Science High School, College of Education,
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ABSTRACT

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The study was conducted on Farmer's Training Center and Techno- Demo Farm (FTCTDF) from September 2008- December 2008. Generally, the study aimed to determine the performance of broccoli under different shading materials. Specifically, it aimed to determine the effects of different shading materials to the growth of broccoli; identify the best shading material suited for growing broccoli and determine the treatment that produced the best quality of the curd of broccoli.

The study used four (4) treatments with four (4) replications. The treatments used were: Treatment 1- covered by net, Treatment 2- covered by plastic sheet, Treatment 3- covered by coconut leaves and Treatment 0- no shading material.

Data were analyzed by Analysis of Variance (ANOVA) technique for Randomized Complete Block Design (RCBD). Duncan Multiple Range Test (DMRT) was used to test the differences among means and treatments.

The parameters taken were Average height of the plants in centimeters, Average width of the curd in centimeters, Average circumference of the curd in centimeters, Average weight of the curd in grams and Average number of leaves. Data were gathered after harvesting the plant except those in measuring the height of plants in centimeters which were gathered every two weeks after transplanting until harvesting season.

The results showed that net was the best shading material in broccoli production. It also showed that coconut leaves is a good substitute to net.

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A Research Study submitted to the Faculty of Science High School, College of Education, Cavite State University, Indang, Cavite in partial fulfilment of the requirements for graduation under the supervision of Prof. Carlos N. Rodil.

INTRODUCTION

The vegetable industry in the Philippines plays an important role both on the economy of the country and its populace. Although improved varieties of vegetable that are disease resistant and high yielding have been developed in recent years and modern cultural practices have been evolved from traditional methods, data showed that the total area planted to vegetable and total production have been increased slightly (*Mabesa, 1980*).

Broccoli is a plant of the cabbage family, Brassicaceae family. It is primarily grown for its edible curds, high nutritional value and attractive appearance. It contains a lot of healthy nutrients needed by the human body such as antioxidant vitamins, beta carotene, vitamin C, vitamin E, iron and potassium. It also contains the phytonutrients, indoles and sulforaphane that have anti cancer effects (*Wolford, 2004*).

Among top ten food crops in the local market, the broccoli ranks first in high value but ranks last at production and yield. For the past ten years, there was only 0.15%