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ROOTING OF COFFEE CUTTINGS  
AS AFFECTED BY DIFFERENT  
ROOTING HORMONES

RESEARCH

Agri-Science Curriculum

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DON SEVERINO AGRICULTURAL COLLEGE

Indang, Cavite

April 1990



**ROOTING OF COFFEE CUTTINGS  
AS AFFECTED BY DIFFERENT  
ROOTING HORMONES**

**A Research Paper Submitted to the Faculty of  
the Agricultural Science Department of the  
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*Rooting of coffee cuttings as affected by  
different rooting hormones  
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**by**

**ROSARIO AMBAGAN CAPALAD**

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## A B S T R A C T

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Adviser: Mrs. Edna A. Vida

The study, "Rooting of Coffee Cuttings As Affected by Different Rooting Hormones" was conducted to: (1) determine the response of coffee cuttings to different rooting hormones; (2) find out which of the rooting hormones, viz: IBA, NAA, human urine, tea manure from chicken dung and other endogenous hormones such as crude extract from tips of coffee cuttings and crude extract from tips of santan cuttings, is best for inducing root formation and with highest percentage survival. This was conducted at DSAC, Indang, Cavite from August to December, 1989.

Eighteen (18) propagators were constructed and were filled with five-inch thick combination of the-roughly sterilized river sand, garden soil, and chicken dung. A total of 360 coffee cuttings were used in a factorial experiment arranged in a Complete Randomized Design (CRD) with six (6) treatments and three (3) replications. The cuttings were treated with rooting hormones then planted carefully in the propagators.

This study revealed that the different rooting hormones did not induce root formation. However, leaves were produced by the cuttings with IBA treatment having the most number of leaves.

Insignificant results could be attributed to insufficient auxin content of the endogenous rooting hormones. The coffee cuttings used did not respond to the rooting hormones because the concentration of the endogenous rooting hormones may not be the right one. The cuttings used are of the two-nodal type and since they are longer, the rate of transpiration is higher. Frequent occurrence of typhoons in addition to attack of pests and diseases contributed to the poor result obtained.

It is therefore recommended that the concentration of the endogenous rooting hormones be studied to find out the right concentration that could induce root formation. Shorter cuttings of one-nodal type are recommended so that the rate of transpiration would be lower. It is also recommended that further studies be made in order to obtain better results.

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by

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<sup>1/</sup> A research paper submitted to the Faculty of the Agricultural Science Department, Don Severino Agricultural College, Indang, Cavite in partial fulfillment of the requirements in Applied Research IV. Prepared under the supervision of Mrs. Edna A. Vida, adviser.

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INTRODUCTION

Importance of the Study

Coffee is a plant which belongs to the different species of family Rubiceae. It is used as food and medicine long ago, but now it becomes one of the leading beverages throughout the world. Hence the good place of the product in the world market. This product has been one of our leading exports and has earned millions of dollars for our country.

During the recent years, all coffee plants used for commercial planting were propagated from seeds, but several studies revealed that the agronomic characteris-