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PRODUCTION OF STAMP INK FROM MALABAR  
SPINACH ( *Basella rubra* Linn. )

RESEARCH STUDY

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SPINACH (*Basella rubra* Linn.)**

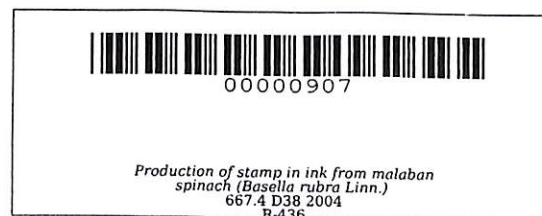
**A Research Study submitted to the  
Faculty of Laboratory School,  
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**In partial fulfillment  
of the requirements for Graduation**

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## ABSTRACT

**DEL MUNDO, CHARISSE A.; LUCLUCAN, RON REINEL D.; and NUEZA, REA CARLA R.**, Applied Research III (General Science Curriculum), Cavite State University, Indang, Cavite, April 2004, **“Production of Stamp Ink from Malabar Spinach (*Basella rubra* Linn.)”**.

Adviser: Ms. Miriam C. Du  
Prof. Dulce Ramos

The study entitled “Production of Stamp Ink from Malabar Spinach (*Basella rubra* Linn.) was undertaken to produce stamp ink from Malabar spinach fruits. This study aimed to (a) determine the color, odor and viscosity of stamp ink as solution; (b) determine the clarity, lightfastness, smudging and intensity of the color as printed on paper of the produced ink; (c) test the acceptability of the extracted ink out of Malabar spinach fruits; and (d) determine the cost of production of stamp ink set and its comparison to commercial stamp ink set. The study was conducted in Alulod, Indang, Cavite from July to November 2003.

The treatments used in the study were; Treatment 0 (commercial stamp ink), Treatment 1 (25 mL Malabar spinach extract), Treatment 2 (25 mL Malabar spinach extract + 7.5 mL denatured alcohol + 2.5 mL vinegar + pinch of table salt + .25 mL iodine), Treatment 3 (11.25 mL Malabar spinach extract + 3.75 mL distilled water + 7.5 mL denatured alcohol + 2.5 mL vinegar + pinch of table salt + .25 mL iodine); and Treatment 4 (7.5 mL Malabar spinach extract + 7.5 mL distilled water + 7.5 mL denatured alcohol + 2.5 mL vinegar + pinch of table salt + .25 mL iodine). Each treatment was replicated three times for optimum results.

The samples of ink were presented to thirty judges for evaluation. General acceptability, clarity, lightfastness, smudging and color of ink as solution and as printed obtained highly significant differences in the results which can be attributed to the different ink concentrations. However, non-significantly different results were obtained from odor and viscosity.

It was also proven that Treatment 1 (pure Malabar spinach extract) can also be utilized as stamp ink.

In terms of economic feasibility, Treatment 4 obtained the lowest cost of production of only P37.62

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# **PRODUCTION OF STAMP INK FROM MALABAR SPINACH (*Basella rubra* Linn.)**

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A Research study presented to the Faculty of the Laboratory School, College of Education, of the Cavite State University, Indang, Cavite in partial fulfillment of the requirements for graduation. This study was conducted under the supervision of Ms. Miriam C. Du

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## **INTRODUCTION**

Ink production is known and popular to other countries because of the usage of imported raw materials. In comparison to our country, this kind of production is oftenly used because of our lack of materials.

Different plants could be used like fruits of bearberry, buckthorn, blueberry, Elder, stems of barberry and tops of Dyers Broom. The only problem with these is that they are located in other countries. In the Philippines, different commodities like Malabar spinach (*Basella rubra* Linn.) could also be a substitute for ink production.

Production of inks from plants will allow us to replace the entire oil-based and synthetic colour industry. The demand for printed matter is higher now than before, indeed the printing industry as a whole.