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UTILIZATION OF LOOFAH IN THE MANUFACTURE
OF FLOWER VASES

RESEARCH STUDY

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UTILIZATION OF LOOFAH IN THE MANUFACTURE OF FLOWER VASES

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ABSTRACT

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Adviser: Engr. Rene Marasigan

The study was conducted to utilize rejected loofah in the manufacture of flower vases. Specifically, it aimed to: (a) determine which proportion of loofah and clay would give the best quality of flower vases; (b) compare the quality of the flower vases made up of clay and loofah with that of the commercial vases; and (c) analyze the cost flower vases from each treatment. The study was conducted at Monica's Pottery, Palahanan, San Juan, Batangas from September to October 2003.

The proportions used in the study were; 100% clay soil (T_0), 90% clay soil and 10% loofah (T_1); 85% clay soil and 15% loofah (T_2); and 80% clay soil and 20% loofah (T_3). Each treatment was replicated four times. The effects of these treatments were compared with those of the control treatment (T_0).

The samples of flower vases were presented to 20 judges for evaluation. The general appearance, texture, and general acceptability of the samples had highly significant differences because the increasing proportion of loofah to clay soil affected the attributes. However, non-significant results were obtained from maximum load and compressive strength of the flower vases.

The study proved that pure clay is still the best material for flower vases but Treatment 1 (90% clay soil and 10% loofah) can also be utilized.

In terms of economic feasibility, Treatment 3 (80% clay soil and 20% loofah) obtained the lowest cost of production of only Php 23.40. Considering the benefit that the loofah manufacturers would receive if the rejected parts of loofah were to be bought, Treatment 3 still obtained the lowest cost of production of only Php 24.00.

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A research study presented to the faculty of the Laboratory School, College of Education, Cavite State University Indang, Cavite in partial fulfillment of the requirements for graduation under the supervision of Engr. Rene Marasigan.

INTRODUCTION

The vegetable *patola* or the sponge gourd that belongs to *genus luffa* is a vigorous annual climbing plant that falls under the cucumber family. It is few angled and almost smooth and grows longer than 30 cm. Sponge gourds are usually green when young and become straw-colored with age. When the skin pulp and seeds are removed from its closely bundles, the 100 percent natural fiber resembles sponges in texture, primarily used as bathing scrub and it is commonly called as loofah.

Sponge gourd has two species grown in the country: the native Patola (*Luffa acutangula*) known for its sharp edges and the smooth and dark green Espanola (*Luffa cylindrica*) which is cylindrical in form and is preferred in the manufacture of loofah products, particularly the bath sponge.

Today, our country faces different kinds of problems and the prices of almost all products are very high. Here in our country, loofah is abundant and is used in the manufacture of different products that can be substituted to synthetic or artificial products