

**EGGSHELLS AND CRABSHELLS AS COMPONENTS
IN MAKING GARDEN POTS**

Research Study

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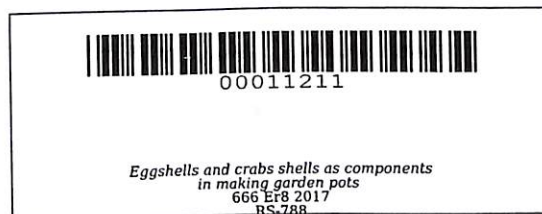
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IN MAKING GARDEN POTS

A Research Study
Submitted to the Faculty of the
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ABSTRACT

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The study entitled “Eggshells and Crab Shells as Components in Making Garden Pots” was conducted in Brgy. Palahanan II, San Juan, Batangas from February 2017 to March 2017 and tested in ASTEC Materials Testing Corporation, Brgy. Sampaloc-1, Pala Pala, Dasmariñas, Cavite on March 13, 2017. This study aimed to produce garden pots with eggshells and crab shells as components, to evaluate the physical properties such as weight, texture, color, thickness and breaking strength, to determine the best treatment for making pots and to determine the cost of production of the pots produced.

The sensory evaluation revealed that Treatment 3 (40 percent of Red clay, 10 percent of Chinese ball clay, 10 percent of Feldspar, 20 percent of Silica and 20 percent powdered eggshells) was the most acceptable in terms of color, Treatment 3 (40 percent of Red clay, 10 percent of Chinese ball clay, 10 percent of Feldspar, 20 percent of Silica and 20 percent of powdered eggshells) in terms of texture and Treatment 6 (40 percent of Red clay, 10 percent of Chinese ball clay, 20 percent of Feldspar, 20 percent of Silica and 10 percent powdered crab shells) in terms of level of acceptability.

The weight of the produced pots ranged from 672.07g to 775.33g and the thickness ranged from 10.01mm to 10.37mm. The breaking strength score ranged from 0.04MPa to 0.12MPa while the cost of production ranged from Php 12.80 to Php 16.80.

The study shows that the powdered eggshells and powdered crab shells can be used as one of the components in the production of garden pots.

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INTRODUCTION

Pottery is the ceramic material which makes up pottery wares, of which major types include earthenware, stoneware and porcelain. The place where such wares are made is also called a *pottery* (plural "potteries"). Pottery also refers to the art or craft of a potter or the manufacture of pottery. A dictionary definition is simply objects of fired clays. The definition of *pottery* used by the American Society for Testing and Materials (ASTM) is "all fired ceramic wares that contain clay when formed, except technical, structural, and refractory products.

Most pot sizes are referred to by their volume capacity in liters, with the exception of pots that are smaller than 1 Liter which are usually referred to by the diameter of the top of the pot. The common size of pot is 5 liters. The diameter of top is 9