

**PRODUCTION OF BAR SOAP FROM LEMON (*citrus x limon*)
EXTRACTS FOR CONTROLLING DOG TICKS**

Research Study

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CONTROLLING DOG TICKS**

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*Production of bar soap lemon (citrus
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ABSTRACT

JOSHUA N. VALMORES, ALVIN A. VIBAR, LEYANNE D. PAEZ Production of Bar Soap From Lemon (*citrus x limon*) Extracts For Controlling Dog Ticks, Research Study, Science High School, College of Education, Cavite State University, Indang, Cavite, May 2017 Adviser: Prof. Agnes B. Alimboyoguen

The study entitled “Production of Bar Soap from Lemon (*citrus x limon*) Extracts for Controlling Dog Ticks” was conducted at Trece Martires City, Cavite from October 2016 to April 2017. This study was conducted to produce a bar soap made from lemon extracts for controlling dog ticks, specifically, it aimed to: 1.) determine the effectiveness of the produced bar soap made from lemon extracts for controlling dog ticks after a week of application; 2.) determine the sensory properties of the produced bar soap from lemon extract in terms of odor, texture, and consistency; 3.) identify which treatment will produce the best bar soap made from lemon extract based on its sensory properties and effectiveness.

There were three treatments of the bar soap from lemon extracts which were labeled as T₁, T₂, and T₃. T₁ contained 100g lemon puree, T₂ contained 50g lemon puree and 50g lemon zest while T₃ contained 100g of lemon zests. The three treatments were applied for a week to nine dogs. The effectiveness was evaluated and measured by the researchers using the standard criteria by Riek and Keith (1973). 30 dog owners were used for the sensory evaluation of the soap. The produced bar soaps were evaluated according to their odor, texture, consistency.

Based on the study conducted, it was concluded that: 1) After a week of application, the effectiveness of the produced bar soap was evaluated. Treatment one produced a highly

effective bar soap for controlling dog ticks; 2) In terms of odor, treatment two was the best bar soap. In terms of texture, treatment three was the best bar soap. In terms of consistency, treatments two and three were the best bar soap.; 3) Based on the results, treatment three produced the best bar soap in terms of its sensory properties while treatment one produced the best bar soap in terms of its effectiveness.

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INTRODUCTION

Many people have dogs in their home that have ticks and based on their experiences, it is difficult to manage and control dog ticks. There are a lot of commercial dog soaps in the market nowadays but the researchers wanted to create their own soap so that they may be able to produce a bar soap that is not harmful to their dogs and a bar soap that is specifically made for their dog's skin. Through this study, benefitted dog owners could save money by making a homemade and all-natural bar soap made from lemon extracts.

The lemon (*Citrus × limon*) is a species of small evergreen tree native to Asia. The tree's ellipsoidal yellow fruit is used for culinary and non-culinary purposes throughout the world, primarily for its juice. This citrus fruit has many uses; as a cleaning agent, in culinary and arts, making lemonades, wood cleaner and polisher, as a non-toxic pesticide, and nowadays, this fruit is also good as a main ingredient in producing soaps.