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UTILIZATION AND ACCEPTABILITY OF USED OIL IN
THE PRODUCTION OF SCENTED CANDLES

Research Study

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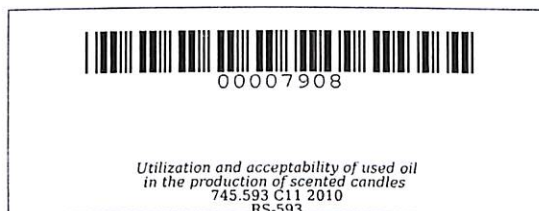
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UTILIZATION AND ACCEPTABILITY OF USED OIL IN THE PRODUCTION SCENTED CANDLES

A Research Study submitted to the Faculty of
Science High School, College of Education
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Indang, Cavite

In partial fulfilment
of the requirements for graduation



CAABAY, ERMAR A.
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ABSTRACT

CAABAY, ERMAR A., and CANDARE, CEDRICK JESS G., Utilization and Acceptability of Used Oil in the Production of Scented Candles Research Study (General Science Curriculum), Science High School, College of Education, Cavite State University, Indang, Cavite, March 2010. Adviser: Mr. Renato T. Agdalpen

The study entitled “Utilization and Acceptability of Used Oil in the Production of Scented Candles” was conducted from October 2009 – January 2010. Generally, the study aimed to determine if the used oil can be utilized to produce scented candles. Specifically it aimed to determine: 1) the possibility of producing scented candles mixed with used oil; 2) the acceptability of the produced scented candles in terms of texture, overall appearance, scent accuracy, brightness quality, and burn rate; and 3) the difference of the commercial scented candles to the most acceptable scented candles produced with used oil in terms of its different characteristics.

There were four treatments used: Treatment 0 (T_0) – (commercial scented candles), Treatment 1 (T_1) – (60mL used oil + 40mL paraffin wax + 10mL essential oil), Treatment 2 (T_2) – (70mL used oil + 30mL paraffin wax + 10mL essential oil) and Treatment 3 (T_3) - (80mL used oil + 20mL paraffin wax + 10mL essential oil).

T_1 was the best treatment among the four treatments in terms of texture, brightness quality and scent accuracy, while T_0 was the best treatment in terms of burn rate and overall appearance. T_1 essential oil obtained the highest mean score after T_0 . It was followed by T_2 and the treatment which obtained the lowest mean score was T_3 .

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UTILIZATION AND ACCEPTABILITY OF USED OIL IN THE PRODUCTION OF SCENTED CANDLES

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A research study presented to the faculty of Science High School, College of Education, Cavite State University, Indang, Cavite, in partial fulfilment of the requirements for graduation with Contribution No.SHS 2010 - 013 Prepared under the supervision of Mr. Renato T. Agdalpen

INTRODUCTION

Oils, specially cooking oil, play an important part in the food industry. Most of the food in modern life is processed using different varieties of cooking oils. However, most of the oil used after being processed just goes to waste. Study shows that as of 2000, the Philippines was producing in excess of five billion litres of waste oil annually mainly from industrial deep fryers in potato processing plants, snack food factories and fast food restaurants. If all those five billion litres could be collected and used to replace the energetically equivalent amount of gas fuel, almost one percent of Philippine oil consumption can be offset (Reyes, 2000).

Homemade candle making has recently become a big trend. More people everyday are using candle making as a hobby and business opportunity. It is a great method to obtain meaningful presents for relatives and loved ones and also to bring in a few extra pesos if one sells them. But the art of candle making is anything but new. Long before lamps and light bulbs were even thought of, candles lit the world.

Essential oil is important essentially in the sense that it carries a distinctive scent,