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DESIGN AND EVALUATION OF A VACUUM-ASSISTED
ESSENTIAL OIL EXTRACTOR

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**DEVELOPMENT AND EVALUATION OF A VACUUM-ASSISTED
ESSENTIAL OIL EXTRACTOR**

**An Undergraduate Thesis
Submitted to the Faculty of the
Cavite State University
Indang, Cavite**

**In Partial Fulfillment
of the Requirements for the degree of
Bachelor of Science in Agricultural Engineering
(major in Farm Power and Machinery)**



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*Development and evaluation of a
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ABSTRACT

NORCIO, MYLENE HAGAPE. Cavite State University, Indang, Cavite. April 1999. "DEVELOPMENT AND EVALUATION OF A VACUUM - ASSISTED ESSENTIAL OIL EXTRACTOR". Adviser: Eng'r. Jaime Q. Dilidili.

The study, "Development and Evaluation of a Vacuum - Assisted Essential Oil Extractor" was conducted at Cavite State University, Indang, Cavite from February to March 1999 to determine the effectiveness of a vacuum-assisted distillation process in extracting essential oil.

The machine was composed of the following parts: tank still, vacuum pump, water pump, oil receiver and gas stove.

Results showed that the principle of operation of the whole machine works but it was not able to extract oil from the mango leaves used during the evaluation of the machine. The oil did not separate with the water.

The cost of the constructed vacuum - assisted essential oil extractor amounted to P15,237.00.

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DEVELOPMENT AND EVALUATION OF A VACUUM
ASSISTED ESSENTIAL OIL EXTRACTOR ^{1/}

by

MYLENE H. NORCIO

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INTRODUCTION

The Philippines is rich in plants containing essential oils of commercial value. Many native plants yield highly-prized essential oils. Nature has blessed the country with fertile soil, tropical climate, and adequate rainfall. These are important factors in growing lush vegetation and essential oil-bearing plants. Some of these plants that are native to the country, such as Ilang-Ilang, pili and patchouli, have already made their mark in the world of perfumery.