

EFFECTIVITY OF MADRE DE CACAO LEAF EXTRACT

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(*Gliricidia sepium*) AGAINST ANTS

(*Tetramorium splendens*)

RESEARCH STUDY

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**EFFECTIVITY OF MADRE DE CACAO LEAF EXTRACT (*Gliricidia
sepium*) AGAINST ANTS (*Tetramorium splendens*)**

**A Research Study
Presented to the Faculty of
Laboratory School College of Education
Cavite State University
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**In Partial Fulfillment
of the Requirements for Graduation**

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ABSTRACT

Matel, Ma. Carolina P.; Torres Randy D.; April 2004. Applied Research III (General Science Curriculum) Cavite State University. **Effectivity of Madre de Cacao Leaf Extract (*Gliricidia sepium*) Against Ants (*Tetramorium splendens*.)**

Adviser: Prof. Eraño Esguerra

The study titled “Effectivity of Madre de Cacao Leaf Extract (*Gliricidia sepium*) Against Ants (*Tetramorium splendens*)” was conducted to make use of madre de cacao leaves in killing pest ants. Specifically it aimed to (a) determine the potential of madre de cacao leaf extract in controlling pest ants; and (b) determine the effectiveness of madre de cacao leaf extract against *Tetramorium splendens*. The study was conducted at 193 Agus-os Indang, Cavite from August to September 2003.

The treatments in the study were: T1 (commercial insecticide); T2 (pure madre de cacao leaf extract); T3 (75% madre de cacao leaf extract and 25% water); T4 (50% madre de cacao leaf extract and 50% water) and T5 (25% madre de cacao leaf extract and 75% water).

Highly significant difference among treatments and time were obtained. It was proven that pure madre de cacao leaf extract is as effective as commercial insecticide in killing ants after 30 minutes exposure.

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A Research study presented to the faculty of Laboratory School College of Education Cavite State University Indang, Cavite in partial fulfillment of the requirement for graduation. Prepared under the supervision of Prof. Eraño Esguerra.

INTRODUCTION

Madre de cacao is a leguminous tree which belongs to family *Fabaceae*. This tree originated in Central America, and used in many sub-tropical countries as live fencing. In the Philippines, madre de cacao is a favorite shade for coffee and cacao plantations. As a medicinal plant, it is collected, washed and crushed to extract the juice from the leaves, and then applied to the area affected by external parasites once or twice a day continuously for a week. In Guatemala, the bark and the leaves of Madre de cacao are used to treat human skin diseases.

Madre de cacao has many compounds but the most common is tannin. Tannins bind to protein and at high levels can make plants have an astringent dry mouth taste. Madre de cacao is an unwanted tree which grows anywhere in the country. It is also non-toxic but has the insecticidal property that is really effective to different kinds of pests.