

# HISTORY OF VETIVER USE IN THE PHILIPPINES

## The Vetiver Farm Philippines Experience

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# VETIVER IN THAILAND





# THE EARLY BEGINNINGS



**Trial propagation on idle  
rice fields**





# THE EARLY BEGINNINGS

## Bare root and poly bagged Vetiver propagation



# EARLY USE OF VETIVER

**Vetiver is reported to have been used in the Philippines as early as the 1930's in slope sugar plantations in San Carlos City**





# Local Names of Vetiver



**In northern Luzon and in Bicol region Vetiver is known as:**

- \* moras**
- \* anias de moras**
- \* ilib**

# FIRST PROJECT

## Kalibo Caticlan Road-widening Project





## SUBIC-TIPO ROAD OLONGAPO CITY







◦ **VETIVER PROMOTION AND  
APPLICATION BY  
GOVERNMENT AGENCIES**

# Department of Public Works and Highways

## Slope Protection Project with Vetiver and Coconets





# Department of Public Works and Highways

## LAHAR DIKE PROTECTION PROJECT





- **VETIVER RESEARCH  
COLLABORATIONS WITH  
ACADEME AND PRIVATE  
SECTOR**



# DE LA SALLE UNIVERSITY



# Efficacy of Fresh Vetiver Roots and Leaf Extracts against Common Cutworm (*Spodoptera litura* Fabr.) and Asian Corn Borer (*Ostrinia furnacalis* Guenee)



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## ABSTRACT

Fresh roots and leaves of vetiver were extracted by boiling and crushing methods, respectively. Toxicity of vetiver extractions were examined on asian corn borer and common cutworm under controlled conditions. Spraying of extracts was done to test the efficacy of fresh vetiver root and leaf extract against common cutworm and asian corn borer. Different concentrations of vetiver extracts (100%, 75%, and 50%) using distilled water as a solvent, were used in this study. Mortality was observed daily for 24, 48 and 72 hours. It was observed that mortality of common cutworm is higher on 75% concentration with 67% mortality on both fresh root and leaf extracts. On the contrary, mortality of asian corn borer only obtained 12% on leaf extract and 8% on root extract at 100% concentration; 7% on leaf and root extracts at 75% concentration; and 8% and 3% on leaf and root extract, respectively at 50% concentration.

## OBJECTIVES

1. To determine the efficacy of vetiver root and leaf extracts against common cutworm and asian corn borer.
2. To compare the mortality of common cutworm and asian corn borer in various concentration of fresh vetiver root and leaf extracts.

## MATERIALS AND METHODS

### A. Fresh Leaf extract



Collect/Harvest, wash and dry fresh roots and leaves of vetiver grass



Crush leaves in a mortar-pestle gently and soak in distilled water



Filter extracts using a funnel with tissue or filter paper



Different concentrations of extract (100%, 75% and 50%)

Spray different concentrations of leaf extract on test insects



Spray different concentrations of root extract on test insects



Observe daily for 24, 48 and 72 hours

### B. Fresh Root extract



Collect/Harvest, wash and dry fresh roots and leaves of vetiver grass



Boil the roots in a vessel/container of 2/3 water quantity of weight until the volume become half of the water quantity, add roots and boil until the final volume reaches 1/4 of the quantity



Filter extracts using a funnel with tissue or filter paper



Different concentrations of extract (100%, 75% and 50%)

Spray different concentrations of leaf extract on test insects



Spray different concentrations of root extract on test insects



Observe daily for 24, 48 and 72 hours

## Results and Discussion

Toxicities of fresh vetiver leaf extract against asian corn borer and common cutworm were shown in Tables 1 and 2. The results demonstrate that mortality of asian corn borer at different concentrations of 50%, 75% and 100% attained 8%, 7% and 12%, respectively. This result indicates lower efficacy of fresh vetiver leaf extract against asian corn borer. On the contrary, fresh leaf extract showed higher efficacy against common cutworm with 63%, 67% and 42% mortality at 50%, 75% and 100% concentrations, respectively (Table 2).





## “Vetiver System on Water Quality Improvement for the Growth and Survival of Pangasiushypophthalmus Under Intensive Culture in Circular Tanks”

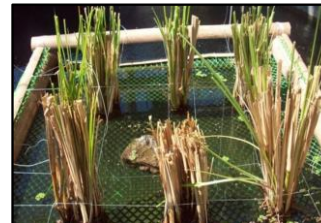


# VETIVER on AQUAPONICS

Vetiver on Aquaponics is a water management strategy to minimize water issues while maximizing efficient use of water characterized by the symbiotic growing of plants (vetiver grass) and aquatic animals in one system.



The pangasius intensive culture project of the LSPU Los Banos Campus College of Fisheries at Los Banos Laguna with nine (9) units of circular concrete tanks (6.5 m<sup>3</sup> capacity) stocked with pangasius fingerlings at varying densities of 300, 450 and 600 fish as study treatments I ( tanks 2,5,9), treatment II ( tanks 1,3,7), treatment III ( tanks 4,6,8) respectively.



A bamboo pontoon (1mx1m) installed last January 24,2014 in each fish production tanks. Each pontoon was planted with 6 balls of vetiver grass at 10-15 shoots per balls.



Vetiver pontoon in tank 8 with newly grown leaves shoots and roots after one month of treatment.

The vetiver grows new shoots and green leaves with the highest count of 118 in tank 4 followed by 113 ( tank 8), 100 ( tank6) . These tanks were stocked with the highest density of pangasius. A 100% survival rate of vetiver grass was obtained in all the pontoon installed.

# ASIA BREWERY





# SLAGRITECH HYBRID RICE







° **VETIVER IN MEDIA**

# PRINT & ONLINE





# TELEVISION AND RADIO







◦ **VETIVER USE BY  
VARIOUS INDUSTRIES**

# MINING

## PHILEX MINING





# MINING

FCF MINING CORPORATION





# REAL ESTATE INDUSTRY

## MIXED USE RESIDENTIAL AND LEISURE DEVELOPMENT



# POWERPLANTS

## MAIBARARA GEOTHERMAL POWER PLANT





# RESORT DEVELOPMENT

## Ananyana Resort





° **VETIVER PRODUCTS**



# HANDICRAFTS & DECORS

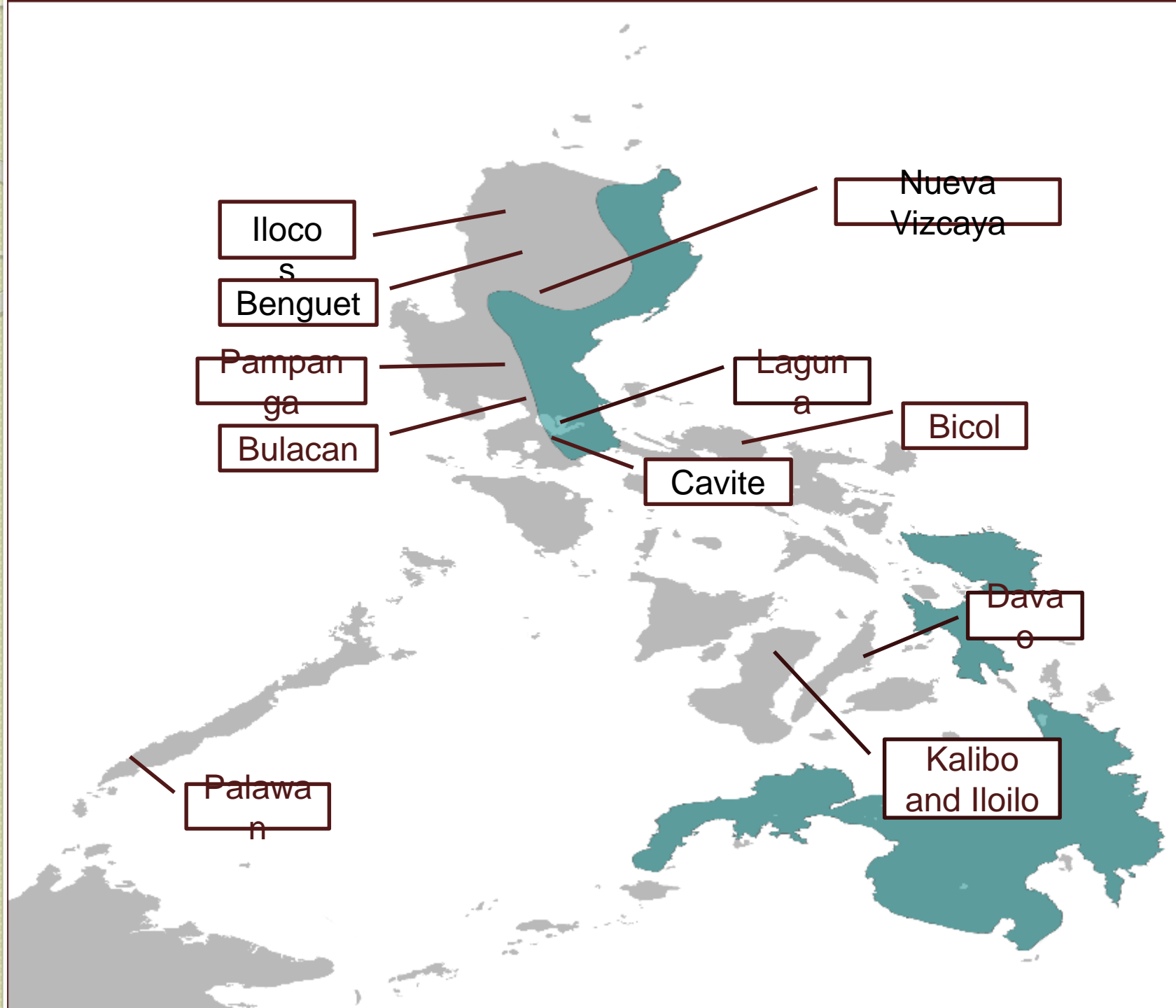


# ESSENTIAL OILS





# **VETIVER ACROSS THE COUNTRY: PROJECTS AND NURSERIES**



Iloco  
s

Benguet

Pampan  
ga

Bulacan

Nueva  
Vizcaya

Lagun  
a

Bicol

Cavite

Dava  
o

Palawa  
n

Kalibo  
and Iloilo



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