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INSECT POLLINATION OF COFFEE

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ABSTRACT

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The experiment was conducted at the coffee plantation of the Cavite State University (CvSU) and Harasan, Indang, Cavite from February 1997 to January 1998. The study aimed to determine the impact of insect pollinators on coffee bean production.

The most abundant insect pollinator of coffee in CvSU was *Trigona* sp. while *Apis cerana* was the most abundant in Harasan.

Diferent honeybee densities (five, ten and 25) were used to pollinate coffee flowers. Highest percentage of fruit set was obtained from 25 honeybees.

The fruit and seed sets of coffee were compared in open, close (no pollination) and honeybee pollinated plants.

Results showed that the presence of coffee pollinators increased the yield of coffee berries. However, higher percentage fruit set was observed in open pollination. This was made possible by the presence of native pollinators such as *A. cerana* and *Trigona* sp. which are the natural pollinators in the Tropical region.

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INTRODUCTION

The coffee plant, *Coffea arabica* L., belongs to the family Rubiaceae. It is one of the most important dollar earner of the Phillippines and a good source of income for the upland farmers of Cavite. Coffee is one of the most important internal revenue commerce on the basis of volume trade. Coffee is harvested for its seeds, which are dried, roasted and ground to prepare drinking coffee. The coffee residues in the processing are used as fertilizer and mulch. Leaves are used as fuel and animal fodder. Coffee is the most important beverage to the Filipinos. Its flavor and aroma gives to the consumer delight, satisfaction and contentment.

Coffee is one of the most important source of nectar and also provides moderate amounts of pollen. The coffee