

ECOLOGY AND MEDICAL IMPORTANCE OF MOSQUITO FAUNA
OF THE VISAYAS STATE COLLEGE OF AGRICULTURE,
BAYBAY, LEYTE

A Thesis
Presented to
the Faculty of the Graduate School
University of San Carlos

In Partial Fulfillment
of the Requirements for the Degree
Master of Science In Biology

by
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ABSTRACT

The mosquito fauna of ViSCA, Baybay, Leyte was assessed from a survey carried out from March, 1976 to October 1976, to study their ecology and medical importance. Nine stations were surveyed and the results showed that in the eight-month survey, 25 species belonging to eight genera were identified.

A total of 1,539 mosquitoes were collected. Of these, Ae. albopictus was the most abundant and prevalent species. It was found out that mosquito distribution was affected by factors such as adaptability of the mosquito to the niche or habitat, elevation, rainfall, and availability of preferred breeding niche. Armigeres and Toxorhynchites were abundant in higher elevation. A high percentage of mosquito larvae were found in bamboo cups, being the most preferred niche especially by Armigeres. At lower elevation, Ae. albopictus was found abundant in tin cans.

An attempt was made to correlate the possible diseases transmitted by the existing species of mosquitoes in the area with the actual record of known cases in the ViSCA Health Center and the Western Leyte General Hospital. Although eight species were considered potential vectors of human diseases, no serious outbreaks of mosquito-borne diseases have occurred in the study area since 1972. Of the mosquito genera found in ViSCA, the Aedes group is the most dominant. This is the most dangerous group of mosquitoes. Effective mosquito abatement program was also suggested.

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CHAPTER I

INTRODUCTION

The Visayas State College of Agriculture (ViSCA) began as the Baybay Provincial Agricultural High School in 1924. In 1939 it was renamed Baybay National Agricultural School (BNAS) and later Visayas Agricultural College (VAC). In 1974, VAC was converted into ViSCA. Since its foundation, the College had remained a relatively small school until recently. It was designated as the regional college of Agriculture for the Visayas. Increased interest of the government in this institution have partly caused the expansion of the campus and increased the number of its faculty and students. The increase in population necessitated the opening of more areas for housing, experimental lots, project sites, school buildings and the like. Such activities have considerably changed the area within the past few years. Baybay, Leyte, where the ViSCA campus is found, is fast becoming a densely populated area.

The sudden influx of people always affects the ecology of a given area. Due to changes in environmental conditions, plant and animal life will be altered. New species of animals may be introduced and become established. Introduction of new species may offset the ecological balance especially if the species are of great economic

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