A PRELIMINARY STUDY ON THE EFFECT OF NEEM (*AZADIRACHTA INDICA*) SEED EXTRACT ON THE REPRODUCTIVE POTENTIAL OF THE FEMALE FRUITFLY (*DROSOPHILA MELANOGASTER*)

by

ARMEE H. ALTEA

An Undergraduate Thesis
Presented to
The Division of Biological Sciences
University of the Philippines in the Visayas
Iloilo City

In Partial Fulfillment
of the Requirements of Biology 200
(Undergraduate Thesis)

April 1994

ABSTRACT

Eggs, first instar larvae, and third instar larvae of fruit flies (*D.melanogaster*), were treated with 0%, 10%, and 15% neem seed extract. This resulted in reduced number of adults that emerged from treated embryos and larvae. Females following treatment crossed with untreated males have reduced number of progeny compared with control (untreatec) females. Treatment of extract at three stages of development indicated that fertilized eggs were most affected by the extract. Females derived from treated eggs were sterile. The number of progeny produced by females treated during first instar stage were considerably reduced compared to controls. On the other hand, the number of progeny produced by females treated during third instar stage was not significantly different from controls. The results suggest that neem seed extract has active components which can reduce the reproductive potential of female fruitflies exposed to the chemicals paricularly at the early stages of development.