

## A PRELIMINARY REPORT ON THE EFFICACY OF SOME BOTANICAL EXTRACTS AGAINST MEDICALLY IMPORTANT MOSQUITOES IN THE PHILIPPINES

Lilian de las Llagas and Ileana R. F. Cruz

College of Public Health & College of Pharmacy, U.P. Manila

The efficacy of some local plant crude extracts against the different life stages of mosquitoes of public health importance was determined.

*Piper nigrum* L. (paminta) prepared as paminta treated sawdust was observed to be the only plant extract exhibiting larvicidal property. Its toxicity was shown by its ability to: kill the young larvae as soon as they hatch from the egg stage, inhibit egg laying of gravid adults (oviposition repellent/deterrent), and regulate the population of old larvae resulting to depletion of mosquito immatures. It was found to be non-toxic to non-target species.

The  $LC_{50}$  value obtained was 0.062 ppm when tested against early fourth instar *Culex quinquefasciatus* strains from Malate in Manila, Cavite and Laguna.

Results of the human skin repellency tests showed that *Gliricidia sepium* (Jacq.) Walp (kakawate) and *Annona squamosa* L. (atis) prepared as lotion provided a protection time of 1.4 and 2.57 hours, respectively, when tested against outdoor biting mosquitoes in rural and urban settings. It was noted that mosquitoes landed and bit within 17.9 minutes when the exposed legs and arms of the subjects were not given any treatment.

On the basis of these available results further studies have been recommended.