



FEDERAL UNIVERSITY OF TECHNOLOGY
MINNA, NIGER STATE, NIGERIA

in Collaboration with

**THE SOCIETY FOR THE CONSERVATION
OF PHYTOFUEL AND SCIENCES**

Presents

9TH

**JATROPHA INTERNATIONAL
CONFERENCE AND EXHIBITION**

JATROPHA 2019

Theme:

**Jatropha as a Tool for Poverty Reduction
and National Development**

Date: 17th - 20th November, 2019.

Venue: Centre for Preliminary and Extramural Studies (CPES) Hall, Bassa Campus,
Federal University of Technology, Minna, Niger State, Nigeria.

Time: 10:00 am daily.

Chairman of the Occasion:

Host
Professor Abdullahi Bala, MSc
Vice-Chancellor,
Federal University of Technology, Minna

Chief Host
His Excellency,
Alh. Abubakar Sani Bello
Governor Niger State

Keynote Speaker

Susceptibility and Resistance of Mosquitoes to Selected Insecticides used in Minna, Niger State, Nigeria.

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ABSTRACT

Mosquitoes harbour and transmit disease causing organisms which are a menace to man and animals. The use of insecticides for the control of mosquitoes continues to be resistance prone. The susceptibility and resistance of *Culex* mosquito to low and high concentrations of lambda-cyhalothrin and dichlovos insecticides commonly used in Minna, Niger State Nigeria were determined using WHO standard procedure. The result shows that susceptibility varied with concentration and between the two insecticides after one hour exposure time. At the low concentrations mortality was 52.63 ± 5.42 % and 66.66 ± 3.83 % lambda-cyhalothrin (0.40 %) and dichlovos (3.00 %) respectively while 98.48 ± 1.51 % and 98.67 ± 1.33 % were recorded for the high concentrations of lambda-cyhalothrin (0.7 %) and dichlovos (7.0 %) respectively. Also control was 4.00 %. After twenty-four hours of exposure; 87.74 ± 2.65 % and 84.06 ± 3.83 % percentage mortality were recorded for the lower concentrations and 100 % for the higher concentrations of lambda-cyhalothrin and dichlovos insecticides respectively; control was 8.33 %. It is therefore concluded that at high concentration *Culex* mosquito was susceptible to the selected insecticides after twenty four hour of exposure.

Keyword: Mosquitoes, insecticide, susceptibility and resistance