## Identifying and Drug Susceptibility of Gram-Negative Bacteria Found in Bactrocera xanthodes (Pacific Fruit Fly)

Myung, Da In (School: South Pacific Academy)

This project was conducted to find more information on Identifying and Drug Susceptibility of Gram-Negative Bacteria Found In Bactrocera Xanthodes (Pacific Fruit Fly). The purpose of this project is to identify the bacteria found in Bactrocera xanthodes and its drug susceptibility in concern of its ability to resist antibiotics. There are two hypothesis, The first hypothesis of the project is that B.xanthodes(pacific fruit fly) will be the carriers of many bacteria. It is also hypothesized that the bacteria the B.xanthodes(pacific fruit fly) carry are not multiple drug resistant (MDR). In order to identify the bacteria it had to go through inoculating, culturing and the vitex machine. The result of the experiment shows that B.xanthodes carry two different bacteria which is the Klebsiella oxytoca and the Pseudomonas putida. As for the Klebsiella oxytoca graph 1 resulted to be resistant to several antibiotics but was also susceptible with certain antibiotics. Graph 2 which was Pseudomonas putida had a pattern of resistant and susceptible and for one of the antibiotic it resulted as intermediate. The experiment shows that B. xanthodes carry 3 specific bacteria which are Klebsiella oxytoca, Pseudomonas putida and Acinetobacter. Therefore, the first hypothesis of the project was supported. As for the second hypothesis, it is neither supported or not supported because more information are needed.