



**PREVALENCE AND INTENSITY OF HELMINTHS IN FISHES
AND THEIR FERMENTED RICE-FISH MIXTURE
OBTAINED IN CANDABA, PAMPANGA**

A Research Presented to the
Biological Sciences Department
College of Science and Computer Studies
De La Salle University - Dasmariñas
City of Dasmariñas, Cavite

In Partial Fulfillment of the Requirements for the degree
of Bachelor of Science in Biology Major in Human Biology

SHAHAD O. ICBAN

IVY O. JIMENEZ

March 2015



ABSTRACT

The traditional fermented foods are part of Filipino food cuisine which are interlinked with the life of local people. However, with the increasing number of cases of parasitism in the Philippines, this study was conducted to determine the prevalence and intensity of helminthes in fresh fish and fermented rice-fish mixtures. Sixty samples of fresh and fermented *Oreochromis niloticus* (Tilapia), *Ophicephalus striatus* (Dalag), and *Clarias batrachus* (Hito) were examined using microscopy. The results showed that the parasitic helminth forms found in fresh fishes are ovum whereas none were observed in fermented rice-fish mixtures. The predominant helminthes in both *Oreochromis niloticus* and *Ophicephalus striatus* are ascarid while in *Clarias batrachus*, hookworms are predominant. The fresh fish samples were found to have a prevalence of 2% and a mean intensity of 1.1. No significant difference ($p>0.05$) was observed among the different types of fresh fish and parasitic form was observed whereas there was a significant difference ($p=0.0001$) between fresh fish and fermented rice-fish mixtures in relation to their prevalences. With these results, it was concluded that fermentation can kill parasitic forms in fresh fishes used in the production of fermented rice-fish mixtures.

Key words: Oreochromis niloticus, Clarias batrachus, Ophicephalus striatus, fresh fish, parasites, fermented rice-fish mixtures, helminths, prevalence, intensity