IN VITRO ANTHELMINTIC ACTIVITY OF MAKABUHAY (*Tinospora rumphii* B.), BETEL NUT (*Areca catechu* L.) AND BITTER YAM (*Dioscorea dumetorum* D.) JUICE EXTRACTS AND THEIR COMBINATION AGAINST ROUNDWORM (*Ascaridia galli*) ISOLATED FROM PHILIPPINE NATIVE CHICKEN

A Project Proposal

Presented to

the College of Agriculture, Resources, and Environmental Sciences

Central Philippine University

Jaro, Iloilo City

In Partial Fulfilment

of the Requirements for the Degree

BACHELOR OF SCIENCE IN AGRICULTURE

By

REUEL EZER D. YARRA

MARCH 2020

IN VITRO ANTHELMINTIC ACTIVITY OF MAKABUHAY (*Tinospora rumphii* B.), BETEL NUT (*Areca catechu* L.) AND BITTER YAM (*Dioscorea dumetorum* D.) JUICE EXTRACTS AND THEIR COMBINATION AGAINST ROUNDWORM (*Ascaridia galli*) ISOLATED FROM PHILIPPINE NATIVE CHICKEN

Reuel Ezer D. Yarra

ABSTRACT

This study was conducted to determine the effectiveness of makabuhay, betel nut, and bitter yam extracts against *Ascaridia galli* worms isolated from Philippine native chicken. This was conducted at CPU-CARES Research and Development Learning Building, Jaro, Iloilo City from February 7 – 8, 2019. The treatments consisted of juice extracts of makabuhay, betel nut, and bitter yam, 50:50 combinations of these 3 extracts. Albendazole and physiological saline were used as a positive and negative control, respectively. The treatments were replicated three times and laid out in a completely randomized design (CRD). Results revealed that worms showed significant signs of paralysis on the 6th hr when treated with 100% BYE (100%) and a mixture of 50% MSE and 50% BYE (96.67%). The paralyzing effects of these plant extracts were comparable with Albendazole (100%). However, on the 18th hr of PE, all plant extracts were as potent as albendazole up to the 24th hr of PE. In terms of percent mortality, makabuhay, betel nut, bitter yam, and their combinations were equally potent in killing *A. galli* worms and were comparable with Albendazole. It can be concluded that all plant extracts and their combinations significantly affect the %WMI and %M of *A. galli* worms and comparable to the synthetic dewormer.