



### ABSTRACT

The study entitled “The physiological effect of varied amounts of *Bacillus thuringiensis* (Bt) corn on *Rattus norvegicus albinus* (Albino Rat) based on the Alkaline Phosphatase (ALP) test aimed to determine the physiological effect of Bt corn concentration on the level of ALP in the serum and to identify any significant difference among the ALP values in the different treatment. The study employed the Randomized Complete Block Design (RCBD) with five treatments, having T<sub>0</sub> as the control group and T<sub>1</sub> (25% Bt corn), T<sub>2</sub> (50% Bt corn), T<sub>3</sub> (75% Bt corn) and T<sub>4</sub> (100% Bt corn) as the experimental groups. Cardiac puncture was conducted to obtain blood samples from the test organism. The obtained blood serum was then subjected to the Alkaline Phosphatase (ALP) test. The result yielded an increase in the ALP value as the Bt corn concentration increases. However, only T<sub>3</sub> and T<sub>4</sub> showed a significant increase based on the post hoc analysis conducted. This increase of ALP values could possibly signify liver diseases such as hepatotoxicity, cholestasis and cholecystitis.