## ABSTRACT

This study was conducted to determine the effect of Fermented plant juice on the growth and yield performance of chili pepper. Specifically, this study was conducted with the following objectives: 1.) to determine the growth performance of chili pepper applied with different levels of fermented plant juice in terms of plant height of chili pepper in 15, 45, and 75 days after transplanting, number of days from transplanting to flowering, number of lateral branches at 30, 45, 60, 75, 90 days after transplanting; 2.) to determine the yield performance of chili pepper applied with different levels of fermented plant juice in terms of the number of fruits per (10) sample plant; the number of marketable fruits per plot; and 3.) Average fruits yield tons per hectare.

The experimental plots were arranged in Randomized Complete Block Design (RCBD) with four treatments replicated three times. An experimental area of 203.5 square meters was laid out in blocks in corresponding replications. Each block has 3 m x 4 m with a 0.5 m pathway between plots.

The different levels of fermented plant juice applied were as follows: Treatment A Control (without Application), Treatment B (30ml of fermented plant juice per treatment), Treatment C (60ml of fermented plant juice per treatment).

Data were recorded, consolidated, tabulated, and statistically analyzed through Analysis of Variance (ANOVA). Comparison among treatment means in treatments with a significant difference was made using the Tukeys test at a 5% level of significance. Statistics were carried out using the Statistix 8.1 version of computer software.

Results of this experiment revealed that the different levels of fermented plant juice applied in four treatments did not significantly affect the plant height at 15, 45, and 75 days after planting; the number of days from transplanting to flowering, number of lateral branches at 30, 45, 60, 75, 90 number of fruits per sample plant, number of marketable per plot, weight of marketable and non-marketable fruits per plot.

Keywords: Chili pepper, fermented plant juice, growth, yield