

ABSTRACT

This study was conducted at the rice field of the researcher area at Brgy. Kinalkalan, Balasan, Iloilo from July to October 2018 to evaluate the black rice applied with different levels organic foliar fertilizer. This study was conducted to evaluate the 1. growth parameters; 20, 40, 60, days after transplanting in terms of height, number of tillers per hill, number of days from transplanting to flowering, number of days from flowering to maturity, weight of herbage yield per plot, 2. Yield parameters number of spikelet per sample plants, weight of grains per plot, 3. The other factors such as drought and heat affects growth development and yield component of rice plant.

The experimental plot was laid out in Randomized Complete Block Design (RCBD) with five treatments replicated three times, the treatment were as follows; Treatment A- without application, Treatment B- 200 ml per treatment or 33.33 liter per hectare of organic foliar fertilizer , Treatment C- 300 ml per treatment or 50 liter per hectare of organic foliar fertilizer, Treatment D- 400 ml per treatment or 66.67 liter per hectare of organic foliar fertilizer, Treatment E- 500mlper treatment or 83.33 liter per hectare of organic foliar fertilizer. The data was statistically analyzed by using analysis of variance at 5% and 1% levels of significant difference among its treatments that were analyzed using the Duncan`s Multiple Range Test (DMRT).

The result of experiment revealed that by applying different levels of organic foliar fertilizer did not affect on the height of rice at 20, 40, and 60 days after transplanting (DAT), number of days from transplanting to flowering, number of days flowering to maturity, and there was a significant difference among treatment means of rice in terms of number of tillers per sample plant and weight of herbage yield per plot.

However, did not affect on weight of grains per plot and there was a significant difference among treatment means of rice in terms of number of spikelet per sample plants.

The other factors such as drought and heat affects the growth development of rice. These factors affect the morphological structure of plant such as plant height, plant hormones and number of tillers. And in physiological such as reduced photosynthesis, transpiration, stomatal conductance, water use efficiency and relative water content.