## Performance of Kalinga's Heirloom Rice Cultivars Under Different Levels of Organic Fertilizer

Rex S. Langngag and Samuel R. Simon Kalinga State University and Isabela State University

## Abstract

The study was conducted under wetland culture at Tabuk City, Kalinga using two factor experiment laid in Randomized Complete Block Design with three replications and with the following treatments: Heirloom rice cultivars which include: a<sub>1</sub>-Chongak and a2-Ulikan Red; Organic fertilizer namely: b1-No fertilizer (control), b2-100% of the recommended rate of fertilizer, b<sub>3</sub>-75% of the recommended rate of fertilizer, b4-50% of the recommended rate of fertilizer and b5-25% of the recommended rate of fertilizer. It aimed to determine which of the different fertilizer treatments would give the best in terms of agronomic characteristics and highest yield of the cultivars and to provide bench mark data on the profitability of producing the two cultivars. Results revealed that different levels of organic fertilizer as a single factor did not produced significant effect on the yield of the two heirloom rice cultivars tested. A significant interaction effect between the two factors tested is obtained in terms of the mean number of tillers, mean number of days to maturity, percent filled and unfilled grains. Ulikan Red obtained significantly the highest mean specifically on the following parameters: number of days to flowering, height at maturity, number of tillers, days to maturity and computed yield in tons per hectare.

**Keywords:** Heirloom rice cultivars, organic fertilizer, Ulikan Red cultivar, Chong-ak cultivar