RINSKORTM Herbicide Efficacy and Contrast Herbicide Towards Weed, Growth, and Rice Field yield (*Oryza sativa* L.)

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ABSTRACT

The production of world's rice crops were placed on the number third from the whole cereals production after corns and wheat. This issue must be involved on government concern in order to continuously increase the national production of rice. Weeds are one of the factors that reduce the production of rice. Weeds are competing with primary plant in obtaining water, sunlight, and the essential part is nutrient from the soil. The purposes of this research are (1) To determine the appropriate dosage of RINSKOR to control weed in the rice field. (2) To determine the impact of growth and rice crops in the field by applying RINSKOR herbicide. Location and period of this research were taking place at the farmer's rice field in Sanggrahan Village, Prambanan, Klaten, Central Java. This research were begun since May 2016 until August 2016. The type of the soil is Regosol and the height of location is 1700 meters above sea level. Ingredients and equipment that used in this research are TENANO 360SC 40 gr/ha, FILLIA 525 SC dosage 300 ml/ha. Automatic spray with tank capacity is 15 liters, bucket, and water dipper to mix or dissolve the herbicide, stopwatch, stationery, ruler, analytical balance, camera, square, etc. Method that applied here is field experiment with Randomized Complete Block Design (RCBD) one factor, with 12 treatments. The wide of experimental rice terraces is 4m x 5m and the spray volume 300 ml/ha. (1) RINSKOR herbicide treatments 25 EC dosage 600 ml/ha – 1000 ml/ha were effective in controlling weed and able to provide better result because the percentage of control is above 90%. (2) RINSKOR herbicide efficacy towards rice plants has no symptoms of toxication, observation of plants toxication were observed 3, 7, 14 and 28 HSA. RINSKOR herbicide is capable to encourage growth that as good as manual control when the height of plants is (cm) 28 HST, the amount of young branch and the amount of panicle per clump while for the rice crops which is the rice weight per terrace (kg) and rice weight per hectare (ton/ha).

Keyword: rice, herbicide, weed