ABSTRACT

THE INFLUENCE OF NITROGEN, PHOSPHORUS AND POTASSIUM FERTILIZER’S DOSAGE ON CIHERANG VARIETY’S RICE PLANT IN THREE LOCATIONS IN NORTH LAMPUNG

By

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Rice is the biggest food plants in Indonesia (more than 90%) citizen consume it. In the national food endurance system, rice become the main actor and decide the national stability. The increases of rice production to cover the national food requirement supported by innovation of superior variety, the usage of superior seeds, and the technology of rice cultivation. The effort can be done by optimal fertilize on the production of Ciherang Variety that legalized by the government on 2000.

This experiment head for: (1). Compare the effect of Nitrogen, Phosphorus and Potassium fertilizer’s dosage using in growth and production of Ciherang Variety. (2). Compare the effect of difference location on growth and production of Ciherang Variety. (3). Know the difference of Ciherang variety’s respond in growth and production by increase Nitrogen, Phosphorus and Potassium fertilizer’s dosage using in three locations in North Lampung.
The treatment applied in experiment’s area by complete random sampling design. The first factor is location (L), consist of Ciamis, Sungkai Utara (L1); Wonomarto, Kotabumi Utara (L2); and Semuli, AbungSemuli (L3). The second factor is fertilizer dosage (P), they are 200 kg Urea/ha, and 50 kg NPK/ha (P1), 250 kg Urea/ha, 100 kg SP-18/ha, and 100 kg KCL/ha (P2); 300 kg Urea/ha, 150 kg SP-18, 150 kg KCL/ha, and micro liquid fertilizer 25 g/ha (P3). The equality between the treatment tested by Bartlett test and the model increased tested by Tukey test. If the assumption completed, data analysis and median separation tested by Beda NvataJuiur test on 0.05.

The outcome of experiment shown: (1) There is no difference growth respond and Ciheraang Variety’s production to the fertilizer dosage, except on 1000 ears variable; (2). Growth and production of rice plants was difference between one and another location based on plants height variable, number of total origin, number of productive origin, number of seeds per stem, weight of 1000 seeds rice, and rice production. The location of Semuli village with the irrigation system product the best plants height variable, number of total origin, number of seeds per stem, and rice production; (3) Respond of Ciheraang variety in Growth and production to the difference using dosage of N, P, and K fertilizers was not different between the location in North Lampung except rice production. The highest production reached in Semuli with medium fertilizer dosage, but there is no clear differences between high and low dosage.

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