

RICE GROWTH AND YIELD (*Oryza sativa* L.) ON VARIOUS PLANTING SYSTEMS AND THE AGE OF SEEDLINGS

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ABSTRACT

The aim of the study was to obtain information of the best for seedlings in various treatments of cropping systems. This research was carried out in the paddy fields of Polodadi village, Tarubasan, Karanganyam, Klaten. The study was arranged in a Completely Randomized Block Design with two factors and 3 replications. The first factor of the Planting System consists of three levels, namely: Persegi empat (37.5cm x 30cm), Jajar Legowo 2:1 (30cm x 30cm x 60 cm), Tapak Macan 2:1 (30cm x 30cm x 60 cm). The second factor of seed age consists of three levels, namely: 7 DAS, 14 DAS and 21 DAS. Parameters for observation were plant height, the number of productive saplings of clumps, the amount of grain containing panicles, the number of panicle grains, number of unhusked grains panicle, the weight of 100 grains of grain, dry grain yield harvest tile plots, and milled dry grain tile plots and hectare. The results of data were analyzed by analysis of variance (ANOVA) at a significant level of 5%. To find out the significant difference between treatments, it is further tested using Duncan Multiple Range Test (DMRT) at a level of 5%. The results showed that there was an interaction between the cropping system and the age of the seedlings and has a significant effect on the number of clumped saplings 60 DAP, the number of productive tillers/clusterdry grain harvest (kg), milled dry grain (GKG), tile plot (kg) and milled dry grain / ha (ton). Tapak Macan system treatment with seedling age of 7 DAS (S3U1) produced the highest yield compared to other treatments.

Keywords: cropping system, seedling age, *Oryza sativa* L