Reduction of P Fertilizer with Various Concentrations of Liquid Smoke on Growth and Results of Some Rice Varieties

By: Altriko Tanggufilya Wintonanda

Supervised by: Endah Wahyurini and Ami Suryawati

ABSTRACT

Liquid smoke is used to reduce P fertilizer and can increase rice growth and yield. The aim of this study was to determine the interaction between reducing P fertilizer and applying liquid smoke concentrations with several rice varieties. The study used a completely randomized design (CRD) consisting of 2 factors with 3 replications. The first factor is the concentration of P fertilizer and liquid smoke which consists of 4 concentration levels, namely: 100% P fertilizer and 0% liquid smoke, 75% P fertilizer and 1% liquid smoke, 75% P fertilizer and 2% liquid smoke, 75% P fertilizer % and liquid smoke 3%. The second factor was the use of 3 rice varieties, namely: Padjajaran, Cakrabuana, and Inpari 42. The observations were analyzed using analysis of variance (ANOVA) and then further tests were carried out using Duncan's Multiple Range Test (DMRT) at a test level of 5%. The results showed that there was an interaction between the treatment of 75% P fertilizer and 2% liquid smoke of the Padjajaran variety on the number of tillers (28, 42, and 56 hst), number of panicles, total tillers, panicle length, number of grain, and grain weight.

Keywords: Rice, P Fertilizer, Liquid Smoke