

***The Influence of ABC Mix and Gibberellin on the Growth and  
Yield of Red Rice (*Oryza nivara* L.) in Soilless Cultivation***  
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**ABSTRACT**

*Using AB Mix as a nutrient in soilless paddy cultivation prolongs the vegetative phase, thereby delaying flowering. The aim of this research is to examine the effect of gibberellin concentration and ABC Mix (AB Mix + silica) on flowering age, growth, and red production yield. This experiment was designed using a split plot based on a completely randomized design with 2 factors and 3 replications. The first factor is the concentration of gibberellin (sub plot), which consists of 2 treatment levels: control and 200 ppm, while the second factor is the ABC Mix concentration (main plot), which consists of 4 treatment levels: EC 750-800 ppm, EC 1000-1050 ppm, EC 1250-1300 ppm, and EC 1500-1550 ppm. The research results show that the treatment of ABC Mix EC 750-800 ppm and GA3 200 ppm significantly differed in plant height (192.0 cm). On the other hand The treatment with GA3 200 ppm showed a significant difference in th grains weight per clump (39.03 grams) and plant height. Other result show that ABC Mix treatment EC 750-800 ppm differences in the tillers number (60.03 stems), productive tillers number (23.03 stems), panicle length (55.42 cm), 1000-grain weight (24.84 grams), and plant height. The ABC Mix nutrients has a complete and balanced nutrient content, so the needs for paddy plant growth during the vegetative and reproductive phases can be met, resulting in more optimal production. While, Flowering age in all treatments reached above 80 HST. This is thought to be due to late application of GA3, flower activation meristem genes takes about 5 days after GA3 application. In addition, GA3 also plays a role in cell elongation which has an impact on plant height, resulting in a delay in flowering initiation.*

**Key Words :** ABC Mix, functional paddy GA3, soilless