

## **Effect of humic acid on growth and yield of Tadong upland rice**

### **ABSTRACT**

Malaysia imports 35% of rice to meet local demand. To meet local demands, rice production must be increased by using sufficient chemical fertilizers. However, the cost of chemical fertilizers rises yearly. Thus, efforts are being made to increase rice productivity while using less chemical fertilizer. The study aimed to investigate the effect of humic acid on Tadong upland rice growth and yield offer the use of chemical fertilizers (nitrogen (N), phosphorus (P), and potassium (K)). The experiment was laid out in a completely randomized design with five replications. The application of different concentrations (2-8 g/mL) of human acid (HA) with half of the recommended NPK (30:15:15) was studied. It is found that using 2 g/mL HA with half of the recommended NPK led to a higher flag leaf length and grain yield per pot. Therefore, HA at 2 g/mL with half of the recommended NPK can produce better vegetative growth and yield of Tadong upland rice. Also, it can reduce chemical fertilizer usage in rice cultivation.