

**THE POPULATION OF BROWN PLANTHOPPER IN PADDY FIELDS AT  
KEDAH**

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Degree of Bachelor of Science (Hons.) Plantation Technology and Management  
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## ABSTRACT

### **The Population of Brown Planthopper at Paddy Fields in Kedah**

Brown planthopper (BPH) (*Nilaparvata lugens*) is one of the major insect pests that affect rice production in Kedah. The BPH attack caused the paddy field to have hopperburn phenomena which is the result of dried up of leaves. This study was conducted purposely to know the population of brown planthopper in paddy fields and the difference of the abundance of brown planthopper population in paddy fields between four provinces involved. The data of brown planthopper population was taken from Muda Agricultural Development Authority (MADA), which has four provinces under their management; Perlis, Jitra, Pendang and Kota Sarang Semut. The data collected consists of area affected by brown planthopper for three years starting from 2014 until 2016, which has two seasons for each year. This study shows that the area affected by brown planthopper population in Province 2, which is Jitra is the highest for all seasons. The outbreak of the brown planthopper in Jitra become the highest among all provinces due to the excessive pesticide and fertilizer application especially nitrogen on the paddy plant. Meanwhile, Province 1, which is Kangar is the least affected by the attack of brown planthopper population. However, this study shows that brown planthopper is not the major insect pest at the study area due to low percentage of total area affected.

Keywords: Brown planthopper, hopperburn phenomena