ABSTRACT

Oil palm is a plantation crop that is used to produce vegetable oil. The *Oryctes rhinoceros* pest is a pest that has a high level of damage. The research aims to explore local isolats of the *Metarhizium* fungus and test the level of virulence in horn beetle larvae (*Oryctes rhinoceros*). Virulence testing was carried out in the pest and disease laboratory with treatment types using a Completely Randomized Design (CRD). Research treatments were taken from several locations which received a total of 9 local isolats. Each local isolat treatment was repeated 3 times so that there were 27 experimental units. Virulence testing on 9 local isolats taken from 2 districts and 3 sub-districts showed that isolats from North Aceh District had a high level of virulence, namely isolat_1 Cot Girek with a mortality of 100%, isolat_2 Cot Girek 100% and isolat_3 Cot Girek with a mortality of 93.33. %. Meanwhile, low virulence was found in Bireuen Regency, Juli District, namely: isolat_1 July with a mortality of 66.66%, isolat_2 July 73.33% and isolat_3 July 66.66%. The fastest lethal time (LT50) required to reduce 50% of the *Oryctes rhinoceros* population was 8 days for the Cot Girek_1 isolat. The highest conidia density was found in the Cot Girek_1 isolat with a conidia density of 105.6×10^{6}.

Keyword : Bioinsektisida, Entomopatogen , *Metharizium, Oryctes,* Virulensi,