



Research projects of counterparts funded at UNJA

Name	Counterpart	Title
Wilyus	B08	Potential of entomopathogenic fungi in rainforest transformation systems In Jambi Province

The use of entomopathogenic fungi as control agents for herbivore pest insect is a promising alternative to chemical pest control. Since they function as natural antagonists of pest species they are assumed to be environmentally safe and are receiving increased interest as biological pest control agents worldwide. Forest are an important production systems for timber and other forest goods. Compared to arable systems they are inhabited by diverse flora and fauna, and this also applies to entomopathogenic fungi. Therefore, using entomopathogenic fungi as natural pest control agents in forests is promising. We explored the potential of entomopathogenic fungi in rainforest transformation systems in Jambi Province from January – December 2014. Entomopathogenic fungi were captured by collecting insects infected by fungi and by biting of entomopathogenic fungi from soil using instar larvae of *Tenebrio molitor*. Entomopathogenic fungi were cultured on Glucose-Yeast-Agar, isolated and identified in Pest Protection Laboratory and Agribisnis Laboratory University of Jambi. The results showed that at the study sites six genera of entomopathogenic fungi occur, namely *Metarhizium*, *Beauveria*, *Verticillium*, *Nomureae*, *Paecilomyces* and *Sorospora*. Each of these fungi are promising candidates for developing biological control species and their usefulness for fighting against insect pest species is currently explored.