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Exploring and Identifying the Effects of Entomopathogenic Fungi to Rice black bugs, *Scotinophara* sp in Rice paddy in Bolaang Monondow

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Abstract: *Scotinophara* sp is a major pest that damages rice fields in Bolaang Mongondow. The use of insecticides failed to stop the rice black bugs attacks. Entomopathogenic fungi can be used to reduce rice black bugs population. However, the function of the type of fungus that can eradicate rice black bugs was not yet identified. This experimental research was conducted to identify the types of fungus that attack rice black bugs by taking samples of nymphs and imago attacked by entomopathogenic fungi in Bolaang Mongondow Regency. Sampling of rice black bugs was done 3 times. Koch's postulates test was employed to see the fungus that infect the rice black bugs. Samples were isolated on PDA media (Patato dextrose agar). Entomopathogenic fungi were purified, then inoculated on healthy rice black bugs. Rice black bugs infected with fungi were isolated again on PDA media. In a mass, of fungus colonies showed reddish white field and after being isolated on PDA media of the colony agregate, entomopathogenic *Paecilomyces* sp. fungus and *Fusarium* sp were found. Fungi as pathogenic agent was only found in Paecilomyces sp. The rice black bugs (*Scotinophara* sp.) were isolated on culture media and inoculation in healthy *Scotinophara* sp showed the same color of the colony during sampling of *Scotinophara* sp. infected with fungus. Both fungi were scattered at the location of *Scotinophara* sp infected with fungi.

Keywords: Type of fungus, rice black bugs, rice paddy.

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