

Identification of Endophyte Fungi and Pathogenicity Test of Rice
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ABSTRACT

*The conventional rice planting system uses many fertilizers and chemical pesticides. The use of unbalanced fertilizers and exaggerated chemical pesticides have a negative effect for the environment. One of the effect is reduction of the ecosystem biodiversity. Microorganism is a biodiversity that has a lot of components. One good component of microorganisms is endophytic fungi. Endophytic fungi that grow in plant tissues without causing symptoms in host plant. This research aims to identification of endophytic fungi and pathogenicity test of rice crops with conventional system. This research was conducted in September 2019 until January 2020. Method that used in this research are exploration, description and qualitative. The result of the research, from exploration in Ayu Ting Ting variety of rice crops obtained 2 types of *Fusarium sp.* and *Aspergillus sp.* that can be isolated from roots, steams, and leaves. From exploration in Inpari 32 variety of rice crops obtained *Aspergillus sp.* that can be isolated from roots, *Trichoderma sp.* from steams and unidentified fungi from leaves. In pathogenicity test, unidentifiend fungi has a percentage of disease incidence 80% while *Fusarium sp.*, *Aspergillus sp.*, *Trichoderma sp.* has a percentage of disease incidence 0%.*

Key words : *Endophytic fungi, rice, pathogenicity test*