

عنوان مقاله:

The Potential of Tofu Liquid Waste and Rice Washing Wastewater as Cheap Growth Media for *Trichoderma* sp. Service Unavailable

محل انتشار:

فصلنامه روشهای تصفیه محیط، دوره 9، شماره 4 (سال: 1400)

تعداد صفحات اصل مقاله: 7

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خلاصه مقاله:

The tofu processing industry in Indonesia is massively increasing. The increasing activity of tofu production causes the disposal of tofu industrial waste to the environment to be higher as well. This condition is exacerbated by the fact that generally, the tofu industry producers do not have their appropriate tofu waste management system. The liquid waste generated from the tofu processing industry will be discharged directly into the waterways. Additionally, people in Indonesia generally use rice as their staple food. The rice washing process produces washing wastewater which is usually discharged into the environment directly. The disposal of these wastes raises the environmental pollution rate. Also, the tofu liquid waste and rice washing water contain some nutrients such as proteins, fats, carbohydrates, and vitamins. The presence of these nutrients will increase the population of pathogenic microbes in the environment. Thus, in this study, the authors discussed the potential of tofu wastewater and rice washing wastewater as alternative media for the growth of *Trichoderma* sp. *Trichoderma* sp. is an antagonistic fungus that can be used as a biocontrol agent for farmers. The use of waste as an alternative medium reduces the mass production and propagation cost of biological agents. In this study, this isolate was cultivated in tofu liquid waste and rice washing wastewater by adding a carbon source. Based on the research conducted, it was known that the average conidial density of *Trichoderma* sp. cultivated in tofu liquid waste was 2.9×10^6 , while the conidial density of *Trichoderma* sp. cultivated in alternative rice washing wastewater was only 1.6×10^6 . The growth of this isolate in tofu liquid waste was higher than rice washing water. It indicated that tofu liquid waste potentially to be used as a cheap alternative growth medium for *Trichoderma* sp. The tofu processing industry in Indonesia is massively increasing. The increasing activity of tofu production causes the disposal of tofu industrial waste to the environment to be higher as well. This condition is exacerbated by the fact that generally, the tofu industry producers do not have their appropriate tofu waste management system. The liquid waste generated from the tofu processing industry will be discharged directly into the waterways. Additionally, people in Indonesia generally use rice as their staple food. The rice washing process produces washing wastewater which is ... usually discharged into the environment directly. The disposal of these wastes raises the environmental pollution rate. Also, t

کلمات کلیدی:

Cheap Media, Tofu liquid waste, *Trichoderma* sp., Rice Washing Wastewater

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