

Title : Glycolipid Production by *Dacryopinax spathularia*

Author(s) : 1. Issareeya Pongsri

Student ID : 650510313

Major : Microbiology

Advisor(s) : 1. Assistant Professor Dr. Boonsom Bussaban

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 Cooperative Education (กรณี นำเสนอผลงานสหกิจศึกษา)

ABSTRACT

Glycolipids are biosurfactants that have attracted considerable interest due to their safety, biodegradability, and environmental compatibility. However, information on glycolipid production from jelly fungi in the class *Dacrymycetes* remains limited. This study aimed to isolate pure cultures, identify species, and evaluate the glycolipid-producing potential of jelly fungi in the genus *Dacryopinax*. Two gelatinous fruiting bodies (HKA and WB3), yellow to dark orange in color, were collected from decaying wood. The isolates were identified and classified based on morphological characteristics and molecular analysis. The isolates were cultivated in liquid media on a rotary shaker to increase biomass, and the inoculum was prepared from the culture that produced the highest dry weight. The fungi were then grown in liquid media containing different carbon sources under shaking conditions to evaluate growth and glycolipid production. Future procedures will involve glycolipid extraction, analysis by thin-layer chromatography (TLC) using an appropriate solvent system with a MEL-A standard, and assessment of biosurfactant activity using the drop-collapsing test.

Keywords: Glycolipid, *Dacryopinax spathularia*, Biosurfactant, Jelly fungi

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