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## Biological Activities of the Mycelial Crude and β-Glucan Extracts of *Auricularia cornea*

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**Abstract :** Selected wild jelly ear mushrooms were screened and identified by analyzing their mycelial crude and beta-glucan extracts. Fresh mushroom samples were collected from Dong Yai Forest, Amnat Charoen Province, Thailand. Auricularia specimens were isolated and identified as saprobic fungi for use in this study. The fungi were inoculated onto agar to permit fungal spore shooting, followed by cultivation in an enriched liquid medium to obtain fungal mycelia. The mycelia were then subjected to extraction and analyses of their contents and biological activities. All saprobic fungi grew well on both agar and liquid medium. They clearly contained different amounts of beta-glucans and phenolic compounds. Among the mushrooms, the mycelia of *Auricularia cornea* (RSPG00622, jelly ear fungus) displayed the highest beta-glucan content and strongest anti-oxidant activities. The extracted beta-glucans also exerted immunomodulating effects on THP-1monocytes exposed to *Escherichia coli* lipopolysaccharide.

Keywords : beta-glucans, fungal mycelium, immunomodulating agent, Auricularia cornea.

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