OPTIMUM LIQUID CULTURE CONDITIONS FOR MYCELIAL GROWTH AND NUTRACEUTICAL ATTRIBUTES OF *Pleurotus cornucopiae*

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ABSTRACT

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Pleurotus cornucopiae, is an edible species of fungus belonging to the genus *Pleurotus* which is like the better known *Pleurotus ostreatus*. In order to evaluate the nutraceutical potential, the optimum culture conditions, mycochemical composition and antibacterial activity were determined. The highest mycelial biomass production were obtained in potato dextrose broth, pH 6.5, static condition, and incubated at room temperature (28^0C) and dark condition. The mycelial extract contain alkaloids, phenols, tannins, anthrones, flavonoids, anthraquinones, steroids, triterpenes, essential oils, fatty acids and sugars. The ethanolic extract has no inhibitory effect against *E. coli* and *S. aureus*. Moreover, the mycelial extract exhibited a radical scavenging activity of 65.17%.

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