

**PROXIMATE COMPOSITION AND FUNCTIONAL ACTIVITIES
OF *Oudemansiella canarii* (Jungh.) Höhn. MYCELIA**

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ABSTRACT

PARINGIT, AIRA YZABEL PATANGUI, Department of Biological Sciences, College of Arts and Sciences, Central Luzon State University, Science City of Muñoz, Nueva Ecija, Philippines, **JUNE 2019. PROXIMATE COMPOSITION ANALYSIS AND FUNCTIONAL ACTIVITIES OF *Oudemansiella canarii* (Jungh.) Höhn. MYCELIA**

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Oudemansiella canarii has flat, smooth and sticky (when moist) surface, grayish white brittle pileus with white spore print and ring-like hyaline basidiospores. In order to establish their nutraceutical potentialities, the mycochemical composition, antioxidant, total phenolic content, cytotoxicity, teratogenic and antibacterial activity were assessed. The mycochemical screening revealed essential oils, triterpenes, coumarines, anthraquinones, tannins, flavonoids, phenols, alkaloids, steroids and coumarins. However, saponins, cardiac glycosides and fatty acids were not detected. *O. canarii* extract showed radical scavenging activity of 67.17% and contained total phenolics 42.13 mg GAE/g. Antibacterial activity shows no inhibitory activity against *S. aureus* and *E. coli*. Delayed growth after 48-hour exposure to *O. canarii* extract and coagulation were the major teratogenic activities observed. The cytotoxicity assay revealed that the ethanol extract of *O. canarii* is toxic with an LC₅₀ value of 196.457 ug/ml. Thus, mycelia of *Oudemansiella canarii* contain bioactive compounds with functional activities such as antioxidant, cytotoxic and teratogenic activity.

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