

**MYCOCHEMICAL, ANTIOXIDANT AND ANTIMICROBIAL ACTIVITY OF
Xylaria papulis COLLECTED FROM PARACELIS, MOUNTAIN PROVINCE**

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ABSTRACT

DIEGO, EMERSON O., Department of Biological Sciences, College of Arts and Sciences, Central Luzon State University, Science City of Munoz, Nueva Ecija, Philippines, **JUNE 2019, MYCOCHEMICAL, ANTIOXIDANT, AND ANTIMICROBIAL ACTIVITY OF *Xylaria papulis* COLLECTED FROM PARACELIS, MOUNTAIN PROVINCE**

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Mycochemical constituents, antioxidant and antimicrobial activity of *Xylaria papulis* collected from Paracelis, Mountain province were evaluated in this study. *X. papulis* exhibited secondary metabolites such as essential oil, triterpenes, coumarines, anthraquinones, tannins, flavonoids, anthrones, fatty acid, phenols, steroids and alkaloids. Additionally, DPPH radical scavenging activity of *X. papulis* showed 55.67%, however, it was lower than the positive control catechin which has 71.13%. On the contrary, *X. papulis* exhibited high total phenolic content of 43.17 mg GAE/g.

On the other hand, the ethanolic extract of *X. papulis* showed a mean zone of inhibition ranging from 16-18 mm. Statistical analysis revealed that the mean zone of inhibition of ethanolic extract has a significant difference with the negative control, positive control and ethanol. The zone of inhibition exhibited by the ethanolic extract of *X. papulis* has an intermediate effect against *Escherichia coli* and *Staphylococcus aureus*. Furthermore, ethanolic extract of *X. papulis* showed low antifungal activity against *Candida albicans*.

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