



**SECONDARY METABOLITE SCREENING AND ANTIMICROBIAL  
ACTIVITY OF *Homalomena philippinensis* Engl. ex Engl. &  
K. Krause (ARACEAE) RHIZOME EXTRACT**

A Research Presented to the  
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### ABSTRACT

*Homalomena philippinensis* is a widespread species in the Philippines and known for its horticultural value but little information is available on its properties and content. The study was conducted to determine the presence of secondary metabolites and its possible antimicrobial activities. The rhizome was collected in Majayjay, Laguna and the presence of secondary metabolites was determined using phytochemical screening. For antimicrobial activity, disc diffusion assay was used against pathogenic and non-pathogenic microorganisms, namely, *Staphylococcus aureus*, *Escherichia coli*, *Candida albicans* and *Saccharomyces cerevisiae*. Oxacillin and gentamicin were used in bacteria while anidulafungin was utilized for fungi as control. Secondary metabolites such as carbohydrates, flavonoids, proteins, sterols and tannins are present while alkaloids were absent. The extract showed mild inhibitory effect against *Staphylococcus aureus* while it showed no inhibition in *Escherichia coli*, *Candida albicans* and *Saccharomyces cerevisiae*.

**Keywords:** *Homalomeana philippinensis*, *Araceae*, *Disc Diffusion Assay*, *Secondary metabolites*, *Microbial activity*