## PHYTOCHEMICAL SCREENING AND ANTIBACTERIAL ACTIVITY OF Paraserianthes falcataria (Falcata) LEAF CRUDE EXTRACT

An Undergraduate Research Study

Presented to the Biological Science Department

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Timmy D. de Leon

**HUB41** 

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## **ABSTRACT**

The purpose of this study was to determine the phytochemical constituents and antibacterial property of the leaf crude extract from *Paraserianthes falcataria*. Phytochemical screening was conducted to determine the presence of alkaloids, flavonoids, polyphenols, and tannins through qualitative chemical tests. The antibacterial activity of the extract was tested against *Staphylococcus aureus*, *Bacillus cereus*, *Salmonella typhi*, and *Escherichia coli* through paper disc diffusion method. Results of phytochemical screening revealed the presence of saponins, polyphenols, and tannins. The leaf crude extract of *P. falcataria* displayed minimal antibacterial activity on *S. aureus* and *B. cereus*. It did not exhibit antibacterial activity against *S. typhi* and *E. coli*. The *P. falcataria* leaf crude extract exhibited minimal growth inhibitory activity. This means that the concentrations were low to inhibit the growth of bacteria. Though there were saponins, polyphenols, and tannins present, the low concentrations of the extract contributed to the low amount of phytochemicals that could execute its antibacterial activity.

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