

Evaluation of anti-bacterial potential of protein isolated from the muscle of *Channa striatus*

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ABSTRACT:

Protein was extracted from muscles of *Channa striatus* and attempts were made to evaluate *in vitro* antibacterial activity against clinical bacterial isolates. The higher concentration of protein (100µg/ml) extracts exhibited a pronounced activity against *Pseudomonas aeruginosa* (21 mm), *Proteus vulgaris* (19 mm), *Citrobacter* sp (19 mm), *Klebsiella pneumoniae* (18 mm), *Micrococcus* sp (17 mm), *Bacillus subtilis* (16 mm), *Staphylococcus aureus* (15 mm), *E. coli* (14 mm) and *Serratia marcescens* (5 mm). The minimum inhibitory concentration and minimum bactericidal concentration were found to be 20-40 µg/ml and 80-100 µg/ml respectively for the extracts of *Channa striatus* protein against test organisms. This study confirms that *C. striatus* fish protein extracts possess antibacterial activity against a wide range of microbes and justified that it could be used in the traditional medicine as a remedy for the treatment of bacterial diseases.

Keywords:

Channa striatus, Anti-bacterial activity, MIC and MBC.