Synthesis and Characterization of silver nanoparticles from *Cynodon dactylon* and evaluation of its proton potassium ATPase inhibitory activity

Gayathri K[1*], Annapoorani B[1],

[1]Department of Biochemistry, Vels University, Pallavaram, Chennai – 117, Tamil Nadu

[*]Corresponding author e.mail :gayathri.sls@velsuniv.ac.in

From National Conference on Interdisciplinary Research and Innovations in Biosciences, NATCON -2018. Post Graduate & Research Department of Biochemistry, Mohamed Sathak College of Arts & Science, Sholinganallur, Chennai-600119, India. 24th & 25th January 2018.

American J of Bio-pharm Biochem and Life Sci 2018 January, Vol. 4 (Suppl 1): **OP24**

ABSTRACT

Nowadays, nanoparticles and nanotechnology is a leading research area. Scientific evaluation of traditional herbs for their pharmacological activities lead nano researchers to synthesize nanoparticles from herbs. In this study, silver nanoparticles are attempted to be synthesized from aerial parts of Cynodon dactylon and evaluate its anti-ulcer activity by proton potassium ATP ase inhibitory activity. Green synthesis of silver nanoparticles has been synthesized and characterized by UV, FTIR spectroscopy and SEM imaging. Anti-ulcer activity of synthesized nanoparticle has been evaluated by Proton potassium ATP ase inhibitory activity in In-vitro condition.UV spectrum shows maximum absorption of synthesized silver nanoparticle at 432 nm. The change in colour from yellow to brown and decrease in pH, SEM imaging further confirms the structure of synthesized nanoparticle. Nanoparticle inhibits proton potassium ATPase is significantly potent than that of aqueous extract of *Cynodon dactylon*.

Published: February 2018.