

***In Vitro* Antibacterial Effect of Ethanolic-Aqua Extract of  
*Stachytarpheta jamaicensis*  
Leaves against Four Selected Pathogenic Microorganisms I.**

**Anthony Swamy<sup>1</sup> and Edwin Miyogo<sup>2</sup>**

<sup>1</sup>Faculty of Science, Asia-Pacific International University, Muak Lek, Thailand; <sup>2</sup>Department of Chemistry, University of Eastern Africa, Baraton, Kenya; drtanthony2011@yahoo.com

**Abstract:** *Stachytarpheta jamaicensis* have been widely used by the people throughout the world for various medicinal purposes. The present study was done to evaluate the antibacterial effect of ethanolic-aqua extract of *S. jamaicensis* leaves against four selected pathogenic bacterial organisms, namely *Bacillus cereus*, *Salmonella typhi*, *Proteus vulgaris* and *Streptococcus pyogenes*. The ethanolic extract was active against all the four selected microorganism. The zones of inhibitions were  $11.503 \pm 0.005$  for *B. cereus*,  $10.766 \pm 0.033$  for *S. typhi*,  $14.766 \pm 0.033$  for *P. vulgaris* and  $13.566 \pm 0.033$  for *S. pyogenes*. The zones of inhibitions of the three microorganism *B. cereus*, *P. vulgaris* and *S. pyogenes* were larger than their positive control penicillin. However, the zones of inhibitions of *S. typhi* were smaller than their positive control. Analysis of variance (ANOVA) showed significant differences ( $p < 0.05$ ) in the zones of inhibition among the organisms. The inhibition shown by the plant leaf extract indicates that such extracts may have great potential in controlling diseases caused by microbes. Further research is needed to show their effectiveness in the in vivo environment.

**Keywords:** *Stachytarpheta jamaicensis*, antibacterial, medicinal, plant leaves, microorganism