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# EVALUATION OF ANTIBACTERIAL ACTIVITY OF *Spirulina plantensis* AGAINST VARIOUS BACTERIAL ISOLATES

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## Abstract

*Spirulina* – Filamentous blue green algae used as a source of food and it has high nutritional value. *Spirulina* having anti-aging, anti-inflammatory, anti-oxidant, anti-tumor, anti-bacterial, anti-viral, fungicidal property. It has many commercial applications in food and pharmaceutical industry. The present study was to evaluate the antibacterial activity of *S. plantensis* were studied against five different organisms namely *P.aeruginosa*, *N.meningitidis*, *B.cereus*, *E.coli* and *Brucella Spp*. The crude extract of *S. plantensis* were obtained using methanol was combined with silver nitrate and copper sulphate and screened for their anti-bacterial activity using agar well diffusion method was studied. Crude *Spirulina* with Silver nitrate showed maximum anti-bacterial activity ( $45 \pm 0.7$ mm) against *E.coli* and *P. aeruginosa*. *Spirulina* with Silver nitrate and Copper sulphate showed maximum activity ( $40 \pm 0.5$ mm) against *Brucella Spp*. The results showed that *S. plantensis* extracts exhibit great potential antibacterial activity.

**Key words:** *Spirulina*, Bacterial isolates, Antibacterial activity, Silver nitrate, Copper sulphate, Agar-well diffusion.

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