

ANTIBACTERIAL OF *CASSIA ACUTIFOLIA* EXTRACT AGAINST SOME BACTERIA AND ANTI-BIOFILM FORMATION ACTIVITIES AGAINST *PSEUDOMONAS* *AERUGINOSA*

ASEEL MOHAMMED HAMZAH

Zoonotic disease unit, Veterinary Medicine College, Baghdad University, Iraq

ABSTRACT

The present study was carried out to determine the potential antibacterial effect of *Cassia Acutifolia* ethanolic extract against *Staphylococcus aureus*, *Escherichia coli* and *Pseudomonas Aeruginosa* using the agar diffusion technique. All microorganisms showed the minimum inhibitory concentrations were investigated to characterize the antimicrobial activities of this extract. The result showed that the least MIC value of alcoholic extract of *Cassia Acutifolia* was 1.25mg/ml against *S. aureus* and 20 mg/ml against *E. Coli* and *P. aeruginosa* whereas the highest MBC value of alcoholic extract of *Cassia Acutifolia* was 50mg/ml against *E. Coli* and *P. aeruginosa* and 5mg/ml for *S. aureus*.

The biofilm inhibitory concentration of the *Cassia Acutifolia* extract was 1.034-0.418mg/ml against *P. aeruginosa* in different plant concentration started with 50 mg/ml to 5mg/ml.

KEYWORDS: *Cassia Acutifolia*, Antibacterial Activity, Antibiofilm Activity