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Antibacterial potentials of the leaf extracts of Siam weed (*Chromolaena odorata*) on wound isolates

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The antimicrobial activity of aqueous, ethanolic and methanolic extracts of *Chromolaena odorata* (Siam weed) was evaluated against four wound isolates: Staphylococcus aureus, Escherchia coli, *Pseudomonas aeruginosa* and *Klebsiella pneumoniae* at the concentrations of 200mg/ml,100mg/ml,50mg/ml and 25mg/ml respectively. Staphylococcus aureus and *E. coli* showed high susceptibility to the various extracts than the other test isolates. The aqueous extract showed activity against Staphylococcus aureus with a mean diameter of zone of inhibition of 16±3.00 at concentration of 200mg/ml and as low as 8±0.00 at concentration of 25mg/ml; *E. coli* showed susceptibility with a mean diameter of zone of inhibition of 18±2.00 and 10±0.00 at a concentration of 200mg/ml and 25mg/ml respectively. *Pseudomonas aeruginosa* and *Klebsiella pneumoniae* were resistant to the aqueous extract. Methanol extract showed activity against Staphylococcus aureus with a mean diameter of zone of inhibition at 28±4.00 and 12±2.30 at a concentration of 200mg/ml and 25mg/ml respectively; while *E. coli* was susceptible with mean diameter of zone of inhibition of 18±2.00 and as low as 12±0.00 at a concentration of 200mg/ml and 50mg/ml respectively, *Pseudomonas aeruginosa* showed considerable susceptibility with mean diameter of zone of inhibition of 13±1.00 and 12±0.00 at a concentration of 200mg/ml and 100mg/ml respectively. The ethanol extract showed activity against S. aureus with a mean diameter zone of inhibition of 15±2.00 and 9±0.00 at a concentration of 200mg/ml and 25mg/ml respectively: *E. coli* showed susceptibility with a mean diameter zone of inhibition of 20±4.00 and 13±2.00 at a concentration of 200mg/ml and 25mg/ml respectively. *Pseudomonas aeruginosa* showed considerable susceptibility with a mean diameter zone of inhibition of 13±1.00 and 9±0.00 at a concentration of 200mg/ml and 100mg/ml respectively. The results above indicate the efficacy and potency of the crude extracts of *Chromolaena odorata* leaf on the tested wound isolates.

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