

Summery

A number of Laboratory studies were conducted on twenty wild plants to determine their antimicrobial activity of its prepared Aqueous and alcoholic extracts. The antimicrobial activity of all prepared extracts were evaluated against gram positive bacteria, *S aureus* and gram negative bacteria, *E coli*, *P vulgaris*, and *K pneumonia*. Six of alcoholic extracts of these wild plants exhibited antimicrobial activity against gram positive and gram negative bacteria while Four of aqueous extracts of these wild plants exhibited antimicrobial activity against gram positive and gram negative bacteria. Alcoholic and aqueous extracts of *Arnebia decumbens* showed the best antimicrobial activity of gram positive and gram negative bacteria, followed by *Rumex vesicarius*, *Thuja occidentales*, and *Achillea surramariaca*. The alcoholic extract of *Plantago lanceolata* and *Convulvulus waltherioides* showed antimicrobial activity against gram positive and gram negative bacteria, while the aqueous extracts of these two plants showed no antimicrobial activity. Cytotoxicity of these extracts was determined throughout the observation of its effects on RBCs. The results showed that all these extracts don't have show any cytotoxicity at the concentration (200mg/ml) which was concluded because there was no haemolysis of RBCs at this concentration. The preliminary qualitative analysis was performed and according to this the flavonoid and alkaloid extract were prepared from *A. decumbens*, phenolic extract from *R. vesicarius*, flavonoid extract from *P lanceolata*, alkaloid extract from *C. waltherioides* and essential oil from *A surramariaca* and *T occidentales*. The antimicrobial activity of each prepared wild plants extract was evaluated against gram positive and gram negative bacteria. The results showed that all these extracts have various degrees of antimicrobial activity against gram positive and gram

Summary

negative bacteria but in different inhibition activity . Cytotoxicity of these prepared extracts was determined on RBCs. The results showed that all extracts don't have any cytotoxicity at all studied concentrations ,except the alkaloid extract of *A. decumbens* that was toxic on RBCs. Flavonoid extract wich prepared from *A decumbens* showed broad spectrum antimicrobial activity thin layer chromatography (TLC) was performed on this extract. Three chemical components with different speeds of mobalization .

Minimum inhibitory concentration (MIC) was determined for all these six effective extracts from these wild plants. Flavonoid extract from *A decumbens* exhibited the least (MIC) against gram positive *S aureus* and gram negative bacteria, *E coli*, *K pneumonia*, *Pvulgaries* wich was (8,8,4,and4)Mg mg/ml respectively.