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## Antibacterial activity of Commiphora gileadensis and Abutilon bidentatum collected from Alabwa region, Saudi Arabia

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Different plants have been traditionally used in folkloric medicine to treat many diseases and disorders or to improve human health due to their secondary metabolites which have excellent antimicrobial activities. Commiphora gileadensis and Abutilon bidentatum were collected from Alabwa region, Saudi Arabia, identified, extracted and their antibacterial activity was determined by agar well diffusion method. Extraction by methanol, ethanol, acetone and hot water was carried out and some multidrug resistant bacteria were used as test bacteria. Maximum activity was recorded for the methanolic extract against all tested bacteria with inhibition zone diameter ranged from 31-35 mm and MIC was ranged from 37.5 µg/ml. The lowest activities were recorded for the water extracts of the two plants, Commiphora gileadensis and Abutilon bidentatum. Abutilon bidentatum extract showed weaker antimicrobial activity against the tested bacteria compared to C. gileadensis leave extracts. It is noticed that C. gileadensis stem extracts showed stronger antimicrobial activity. The methanolic extracts of the two tested plants has no toxicity using Artemia salina as test organism. In conclusion, C. gileadensis and A. bidentatum can be traditionally and safely used against multidrug resistant bacteria due to the efficient antimicrobial activities and low toxicity.

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