

The Potential Anti *Helicobacter pylori* and antioxidant effects of *Artemisia Judaica*

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ABSTRACT

Artemisia judaica (AJ) is one of the common species of the genus *Artemisia* that grows in Saudi Arabia desert and Sinai, Egypt where animals graze on it. It is widely used in traditional medicine and by Bedouins there. (AJ) has anthelmintic, antibacterial, antiinflammatory, analgesic and antipyretic effects. The present study aimed to (1) elucidates the antibacterial action of AJ against *H. pylori* and different other bacterial species (2) delineate the potential antibacterial mechanism of action of AJ in comparison with tetracycline and cefotaxime (3) measure the trolox equivalent antioxidant capacity (TEAC) of the AJ water extract. Preparation of the (AJ) extracts was done by three different methods two of them are usually performed by population in Middle East by boiling of the shade-dried herb in water as tea (decoction), or soaked in tap water for over night (infusion), other method was done by concentrating the aqueous extract of *Artemisia judaica* under vacuum. The results of this study revealed that (AJ) has neither antibacterial effects either against *H. pylori* nor any other bacterial species. On the other hand the extract of AJ prepared by any of the above mentioned methods shows significant ($p < 0.005$) antioxidant action as compared with blank and related to trolox antioxidant capacity.