

- Two different botanical origin honey types (*Ziziphus lotus* and *Euphorbia bupleuroides*) from semi-arid regions in Algeria consisting of twelve samples were tested for their antimicrobial efficiency. Global assessment of antimicrobial activity was made by wells method on integer samples and by turbidity test to locate fraction responsible of this activity. Honeys have been tested against *Escherichia coli*, *Staphylococcus aureus*, *Pseudomonas aeruginosa* and *Candida albicans*. Fungal strain was resistant to all honeys at all concentrations, whereas *E. coli* and *S. aureus* were sensitive presenting minimum inhibition concentrations (MIC) between 10 and 50%. *Euphorbia* honeys appeared to be more active. The fractionation shows that volatile fraction can have great antimicrobial effect, followed by the acidic one. Correlations reveal good relation between inhibitory effect, free acidity and polyphenols. These facts show large possibilities for honey use in soft medicine against some bacterial infections.
- *Copyright of Journal of Microbiology, Biotechnology & Food Sciences is the property of Slovak University of Agriculture in Nitra, Faculty of Biotechnology & Food Sciences and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use. This abstract may be abridged. No warranty is given about the accuracy of the copy. Users should refer to the original published version of the material for the full abstract*