



IR Spectroscopy analysis and Phytochemical content of dates honey

"Robe" of Ghars (*Phoenix dactylifera* L) in El-oued region , Algeria

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Abstract

Robe is a dates honey prepared from dates palm fruit for nutritional and medicinal use. The aim of this study was to evaluate of some phytochemical and biochemical content of dates honey "Robe" of Ghars *Phoenix dactylifera* L. Qualitative analysis of phytochemicals and quantitative analysis of total phenolics, flavonoids and sugar content were prepared by using standard protocols. For the identification of different functional groups, the infrared spectroscopy technique has been used. The results of qualitative phytotochemical analysis revealed that the dates honey Ghars show richness in flavonoids, tannins, saponins, and reducing compounds however poor in alkaloids and terpenoids. The concentration of total phenol (2.055 mg EGA/g) and flavonoid (0.215 mg EQer/g) content show high and the same to concentration of glucose content (2.824mg/g) in dates honey Gars of *P.dactylifera*. Also, spectre IR confirmed that the dates honey Ghars is very rich in condensed phase OH function with aromatic ring C-H bond corresponding polyphenols compounds. The results conclude that the dates honey Ghars "Robe" of *P.dactylifera* contains important nutritive and bioactive compounds may have significant potential for to protect against various diseases.

Key words: Robe, Gars; phytochemicals, IR spectroscopy.