

Effect of heat treatment on antimycotic activity of Sahara honey

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doi: [10.12980/JCLM.2.20143D420](https://doi.org/10.12980/JCLM.2.20143D420)

Objective: To evaluate the influence of the temperature on honey colour, polyphenol and antimycotic capacity and to evaluate the correlation between these parameters. contents

Methods: Sahara honey were heated up to 25, 50, 75 and 100 °C for 15, 30 and 60 min, and their ucoselodu rto i ndteetnesrimtyi,n ep otlhyp htoetnaol lp coolynptehnetns al ncdon natnetnimts y(cToPtCi)c. Tcahpea acnittyim. Tyhcoet iFco laicnt-ivCiitoyc walatse ue vteaslut awteads both by agar diffusion method and micro wells dilution method against the *Candida albicans* (*C.albicans*) and *Candida glabrata* (*C. glabrata*).

Results: Initial values for TPC in Sahara honey ranged from 0.55 to 1.14 mg of gallic acid per akfgt eorf hheoant-eytr,e watimthe ntht ew earvee r0a.g54e tvoa l1u.5e4 owf i0th.7 8th me ga voefr aggaell ivca laucei do fp 1e.r4 9k gm og.f Thhoen emy.i nTimhea IT PinCh ivbailtuoerys concentrations before heat-treatment of Sahara honey against *C. albicans* and *C. glabrata* rcaonngceedn tfraotmio n3s.0 6b%-tw12e.e5n% 1a2n.5d 50% respectively. After heat-treatment the minimal inhibitory diameters of inhibition zones %of aSnadh a5r0a% h ofonre yC w. iathlb icans and *C. glabrata*, respectively. The mm by *C. albicans* to 50% concentration varied from (12.67-15.00) heat-treatment at (14.33-15.67) mm by *C. glabrata*. The diameters of inhibition zones after 25 and 50 °C for 15.30 and 60 min ranged from (2.00-18.67) mm by *C. albicans* to (i8n.t0e0n-s1i6ty.6 o7)f mm by *C. glabrata*. Statistically significant relations between the TPC and the colour is not correlSaatehda rwai htho nthey a(rn=t0im.99y,c Pot<ic0 .c0a5p). aFcuitryth.ermore, the results showed that the TPC and colour

Conclusions: To our knowledge this is the first report on the antimycotic capacity of Sahara honey

KEY WORDS : Sahara honey, Antimycotic capacity, Heat treatment