



Journal

EFFECT OF OLIVE, MORINGA LEAVES AND MARIGOLD PETALS EXTRACTS AS ANTIOXIDANT ON ABT STARTER OF BIO-YOGHURT.

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ABSTRACT

The objective of this study is producing bio- yoghurt fortified with Olive, Moringa Leaves and Marigold Petals Extracts as Antioxidant and functional foods. 0.1g/L, 0.2 g/L and 0.3 g/L of Olive, Moringa leaves and Marigold petals Extracts were added to ABT- yoghurt and stored for 16 days at 4 ± 1 °C. Antioxidant activity was evaluated by 2,2-Diphenyl-1-ptycrylhydrazyl (DPPH) and 2,2'-azino-bis (3-ethylbenzothiazoline-6-sulphonic acid (ABTS) scavenging radical and the bacterial counts were enumerated individual, sensory evaluation was tested by total acceptability. The highest values of DPPH and ABTS with Olive then Moringa after that Marigold compared with Control; the same trend observed on ABT- starters, the highest values obtained at the 8th day it was of *S. thermophilus* 41×10^8 cfu/g, 14×10^8 cfu/g and 95×10^7 cfu/g for 0.3 g/L extracts. Also, *L. acidophilus* was 51×10^8 cfu/g, 21×10^8 cfu/g and 59×10^7 cfu/g. Meanwhile, *B. bifidum* was 41×10^7 cfu/g, 19×10^7 cfu/g and 86×10^6 cfu/g. for 0.3g/L Olive, Moringa and Marigold, respectively. Sensory evaluation proved that the best acceptance gained by Olive extract and high concentration of Moringa and Marigold were unacceptable. Olive had the best extract as antioxidant activity and stimulates ABT-starter followed by Moringa then Marigold compared with control.

Key words: Antioxidant activity – *Bifidobacterium bifidum* and *Streptococcus thermophilus* - DPPH - *Lactobacillus acidophilus* –Marigold Petals – Moringa leaves– Olive Leaves