كلية الزراعة
قسم الميكروبيولوجيا الزراعية

جامعة الفيوم

Atalla, K. M., **Seoudi, O. A.,** Elbanna, K. A., Osman, N. S. **(2017)**. Effect of some indigenous different plant and algal extracts as antimicrobial agents and food preservatives. Fayoum J. Agric. Res. & Dev. 31 (2): 95 - 114.	بحث إضافى أول نشاط علمى
مشترك مع آخرين بالتخصص– منشور- مستخلص من رسالة.	I

Title	**Effect of some indigenous different plant and algal extracts as antimicrobial agents and food preservatives.**
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ABSTRACT

This experiment was conducted to investigate the antimicrobial effect of some plants and algae. Fifteen plants and three algae were used. Extracts were obtained using ethanol: water, hexane, chloroform and methanol. The MIC and MLC were also determined. The results showed that P. granatum extracted with ethanol: water gave the highest inhibition zone against tested microorganisms. Ulva algae gave the best results when extracted with chloroform followed by hexane. Ethanol: water extracts also gave the highest inhibition against tested fungi followed by hexane and methanol. The MLC against *E. coli was* 16mg/ml with P. guava, but reached 256 mg/ml with *R. officinalis*. MIC with *L. mobilis* and *E. globulus* appeared only with 8mg/ml against *A. parasiticus*. Feeding rats on plant and algae extracts had no significant effect on body weight, but there were significant changes in liver enzymes. With the five treatments carried out on Ras cheese, there was no significant effect on the organoleptic properties which means that there extracts could be safely used for human consumption.