



Enzymatic studies on some fungi isolated from the mountain honey

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(Microbiology)**

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﴿قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا عَلَّمْتَنَا
إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ﴾

صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ

**This thesis has not been submitted for
any degree at this or any other
university**

Eman Karam Abd El-Hameed

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Aim of the work:

The objective of this work is to detect the presence of fungi in the mountain honey and study the production of some enzymes produced from these fungi and enzyme found in honey.

Plan of work:

- 1- Isolation of fungal strains from Yemen honey collected from the nectar of desert flowers plants.
- 2- Characterization and identification of the chosen fungal strain.
- 3- Studying of some enzymes produced from the chosen fungal strain compared to the honey enzymes.
- 4- Studying of some factors affecting the production of the most potent enzyme
- 5 - Partial purification of the chosen enzyme.
- 6- Immobilization of the partial purified enzyme.
- 7 - Comparative studies on the properties of the free and immobilized enzyme.
- 8 - Some applicable experiments on the produced enzyme would be tried.

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Abbreviations and Symbols

<i>A. niger</i>	<i>Aspergillus niger</i>
<i>A. awamori</i>	<i>Aspergillus awamori</i>
°C	Degree centigrade
g	gram
h	hour
l	Liter
µg	Microgram
mg	Milligram
min	Minute
ml	Milliliter
mM	Millimole
Mol	Mole
MW	Molecular weight
PVA	Poly vinyl alcohol (Synthetic sponge)
PVAG	Poly vinyl alcohol immersed in solution consisted of liquefied agar (1.8%) mixed with starch (0.2%).
Luffe LG	Luffe immersed in solution consisted of liquefied agar (1.8%) mixed with starch (0.2%).
rpm	Revolution per minute
SDS	Sodium dodecyl sulfate
SSF	Solid state fermentation
SmF	Submerged fermentation
U	Unit

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