



KING ABDULAZIZ UNIVERSITY

Lab # 5

The Effects of Biological factors on Growth

Physiology of microbiology
Bio 336



The Effects of Biological factors on Growth



Antibiosis :

an antagonistic association between two organisms (especially microorganisms), in which one is adversely affected.

is a biological interaction between two or more organisms that is detrimental to at least one of them.

It can also be defined as inhibiting the microbial growth of another microorganism by releasing a chemical inhibitory known as antibiotic or altering the conditions of the medium, thus **reducing** or **inhibit** the growth of the other microbe.



➤ Effect of fungi growth on bacteria:

By producing substances that are secondary metabolites produced by fungi in the environment in which they grow Of the secondary metabolites:

1. Mycotoxins
2. Hormones
3. Antibiotics

➤ The most fungal species producing fungal toxins:

(Fusarium, Penicillium, Aspergillus) As they have a capacity to produce more than two thirds of the number of known fungal toxins.



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Experiment # 1

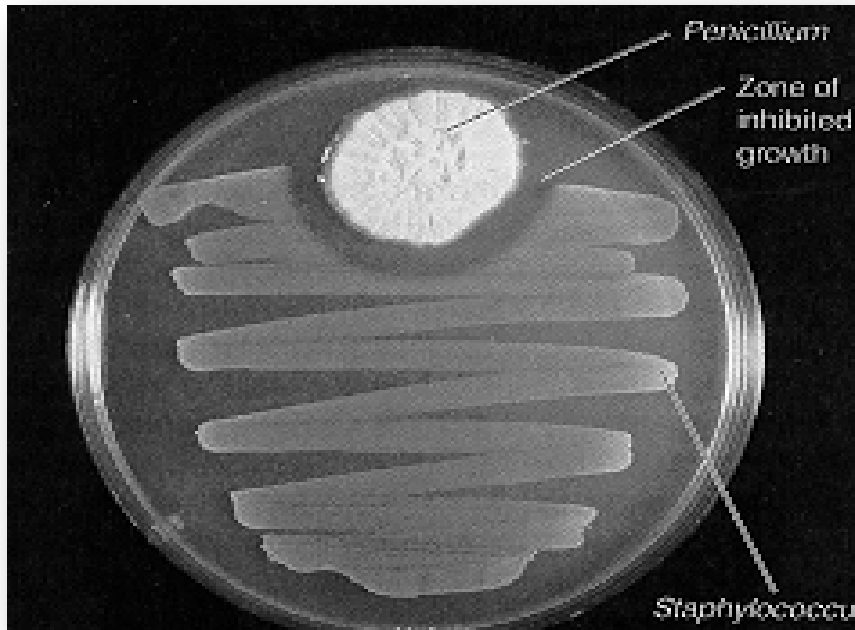
Study the effect of Fungal growth on Bacteria

❑ Material and Experimental Protocols:

❑ Observation and results:

❑ Conclusion:

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Inhibition of growth of one microorganism by another

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Experiment # 2

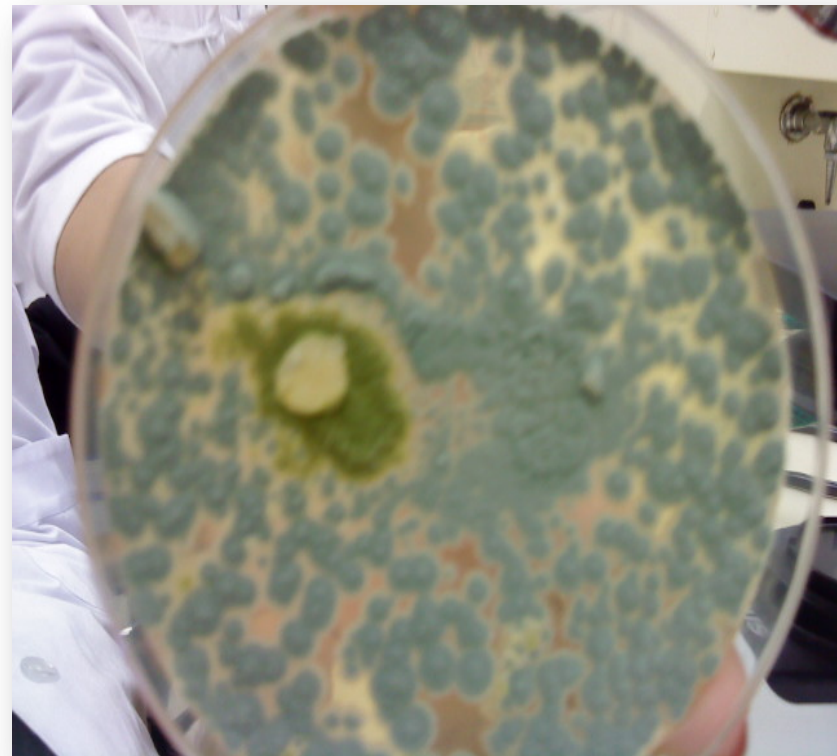
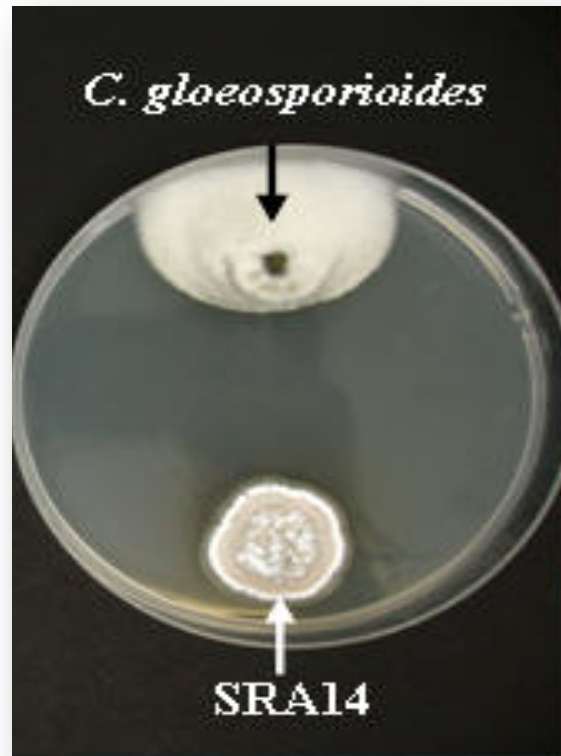
Study the effect of Fungal growth on other fungi

❑ Material and Experimental Protocols:

❑ Observation and results:

❑ Conclusion:

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The effect of Fungal growth on other fungi

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