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STUDIES ON THE POSSIBLE ANTIMICROBIAL EFFECTS OF POLYFLORA HONEY

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• Introduction

Antibiotic resistance is an increasingly common natural phenomenon in bacteria. Finding alternative methods of administering active biological compounds with antimicrobial properties is intensively studied scientifically. Honey is used both as food, and recently for therapeutic purposes, wound treatment due to its antimicrobial properties. The biological material tested was polyflora honey, produced in 2021 from an ecological apiary.

• Material and method

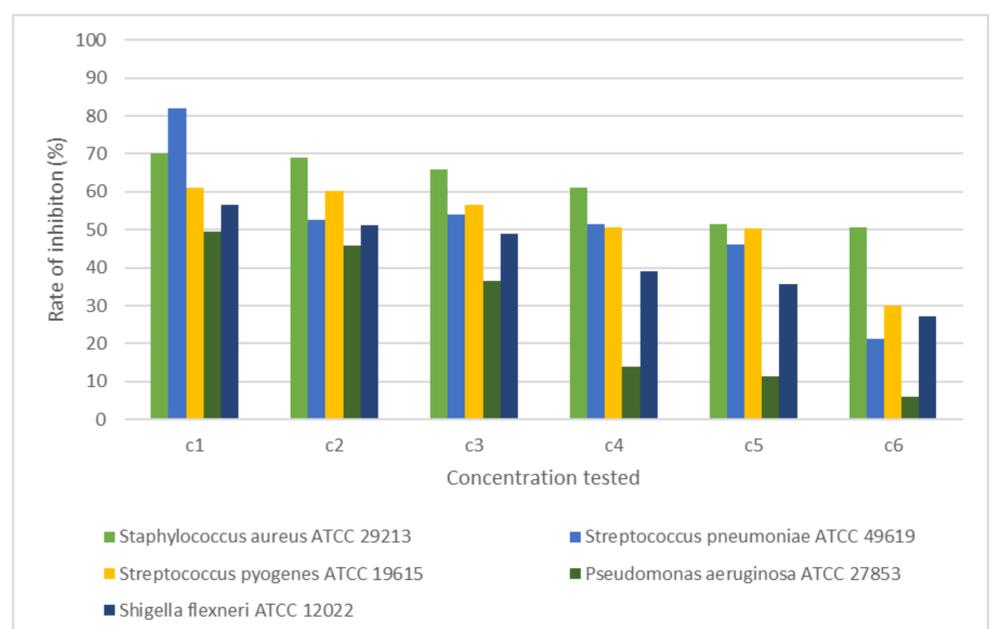
The studies consisted of testing 6 concentrations of polyflora honey, on 5 standardized bacterial strains Gram+ *Staphylococcus aureus* ATCC - 25923, *Streptococcus pneumoniae* ATCC - 16903, *Streptococcus pyogenes* ATCC - 19615, respectively Gram - *Pseudomonas aeruginosa* ATCC - 27853, *Shigella flexneri* ATCC - 12022.

Conclusions

The effect exerted by polyflora honey varies from bacteriostatic to bacteriolytic depending on the strain and the tested concentration. The obtained results support the use of honey as a potential antimicrobial alternative against bacterial diseases.

Acknowledgement: This study is part of the project: "Increasing the economic yield of honey through the implementation of a system of analysis and quality".

• Results and discussions



The possible antimicrobial effect of honey was analyzed by the method of determining cell viability.

The results obtained indicates the decrease of the antimicrobial effect of honey with the decrease of the tested concentration.