

Abstract

The purpose of the study was to investigate whether the selected bee products honey, propolis extract and royal jelly inhibit the growth of gram-positive and gram-negative bacteria. For the study to be possible to perform, a laboratory method was used where bacteria were grown on agar plates and where the gram staining method was used to be able to identify whether the bacteria that were grown were gram-positive or gram-negative. The identified bacteria were transferred to new agar plates where the bee products examined were also placed. The agar plates were kept in a heating cabinet for 72 hours. The laboratory results showed that propolis extract had the greatest antimicrobial effect as it is the only product that formed clear inhibition zones. The inhibition zone on the gram-positive bacteria was 22 mm and on the gram-negative 20 mm. Honey inhibited the growth of gram-positive and gram-negative bacteria that came in direct contact with the product. Royal jelly did not affect the growth of gram-negative bacteria. Several factors may have affected the results of this study and in further research these should be taken into consideration.