PROXIMATE ANALYSIS AND ANTIMICROBIAL ACTIVITY BETWEEN NATURAL HONEY AND PROCESSED HONEY

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ABSTRACT

PROXIMATE ANALYSIS AND ANTIMICROBIAL ACTIVITY BETWEEN NATURAL HONEY AND PROCESSED HONEY

Honey is a sweet food made from honeybee's (Apis sp.) nectar. However, processed honey is also sold in the market besides the natural one. However, the benefits of consuming honey are still not clear and can be debated. Therefore, the proximate analysis of natural and processed honey samples was determined by using several chemical and physical analysis methods. The proximate analysis values of honey samples show that the ash content ranged from 0.07% to 0.14%, moisture content ranged from 12.53% to 13.55%, nitrogen content ranged from 0.01% to 0.02%, fat content ranged from 0.07% to 0.14%, and sugar content ranged from 85.60% to 86.69% from the sample solution. The results of antimicrobial activity testing against Staphylococcus aureus with the natural honey show values from 20 mm to 41.3 mm, followed by the processed honey samples that show values from 36.7 mm to 42 mm. On the other hand, the antimicrobial activity testing against Escherichia coli gives a much smaller values in which the natural honey gives values only from 0 mm to 20.7 mm as compared to the processed honey that values from 21.3 mm to 30.7 mm. As a conclusion, both natural and processed honey show a slightly different in proximate analysis and antimicrobial activity.