Efek antibakteri ekstrak daging buah & biji avokad terhadap strepcoccus mutans (Penelitian eksperimental laboratorik dengan metode ekstraksi infundasi)

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Abstrak

Daging buah Avokad mengandung senyawa fenol (flavonoid, tannin), dan alkaloid yang secara teoritis dikatakan memiliki efek antibakteri.

Tujuan: Mengetahui efek antibakteri ekstrak daging buah Avokad terhadap Streptococcus mutans.

Metode: Ekstrak daging buah Avokad diekstraksi dengan metode infundasi, kemudian dibuat menjadi 4 konsentrasi yaitu 80%, 90%, 95%, dan 100%. Ekstrak tersebut lalu diujicobakan kepada Streptococcus mutans yang diisolasi dari saliva 20 mahasiswa FKG UI. Efek antibakteri diuji dengan menggunakan metode difusi dan pengenceran, yang ditujukan untuk menentukan diameter zona hambatan, kadar hambat minimum (KHM) dan kadar bunuh minimum (KBM).

Hasil: Nilai mean diameter zona hambatan yang dihasilkan ekstrak daging buah Avokad, yaitu: konsentrasi 80%: 1,368 mm; 90%: 1,391 mm; 95%: 1,171 mm; 100%: 1,800 mm. Ekstrak daging buah Avokad tidak memberikan nilai KHM dan KBM.

Kesimpulan: Pada penelitian ini, efek antibakteri ekstrak daging buah Avokad belum terbukti efektif terhadap Streptococcus mutans.

Saran: Dilakukan penelitian lebih lanjut tentang efek antibakteri ekstrak daging buah Avokad menggunakan metode ekstraksi berbeda.
<hr><i>Nowadays, traditional plants are becoming more often to be used as an alternative choice for healing mouth diseases, including tootache. One of them is Persea americana, which is known as Avocado, that is used to heal tootache. Avocado fruit contains phenol, flavonoid, alkaloid, and tannin which are studied having an antibacterial effect.

Objective: To determine the antibacterial effect of Avocado fruit extract on Streptococcus mutans.

Method: The bacteria used in this experiment was identified from 20 dental students in University of Indonesia. The experiment used infundasion method to extract the fruit. The extract concentration tested were 80%, 90%, 95%, 100%. The test method of the antibacterial effect were diffusion and dillution method, which were used to determine the inhibition zone, minimum inhibition concentration (MIC) and minimum bactericidal oncentration (MBC).

Result: The inhibition zone of Avocado fruit extract were 80% concentration: 1,368 mm, 90%: 1,391 mm,

95%: 1,171 mm, 100%: 1,800 mm. Avocado fruit extract did not have MIC and MBC values.

Conclusion: On this research, Avocado fruit extract (infundasion method) had not been proven effective to give an antibacterial effect on Streptococcus mutans.

Suggestion: The next research will be about the antibacterial effect of Avocado fruit extract using a different extraction method.</i>