INTISARI

Karies merupakan suatu penyakit pada jaringan keras gigi yang sering terjadi pada anak-anak. Karies disebabkan beberapa faktor seperti *host,* mikroorganisme*,* substrat serta waktu. Mikroorganisme yang berperan dalam terjadinya karies salah satunya bakteri *Streptococcus mutans.* Daun ketul (*Bidens Pilosa*) mengandung senyawa fitokimia yaitu flavonoid, tannin, dan saponin yang memiliki efek antibakteri. Tujuan penilitian ini untuk mengetahui daya hambat ekstrak etanol daun ketul *(Bidens pilosa)* 1%, 1.5%, 2% terhadap pertumbuhan *Streptococcus mutans* ATCC 25175.

Jenis penelitian adalah eksperimental laboratoris. Bakteri yang diuji adalah *Streptococcus mutans* ATCC 25175. Bakteri *Streptococcus mutans* ATCC 25175 dikultur terlebih dahulu pada media *Mueller hinton Agar* (MHA). Uji daya hambat dilakukan menggunakan difusi cakram *Kirby-bauer* dengan cara direndam pada ektrak etanol daun ketul 1%, 1.5%, 2% dan *chlorhexidine gluconate 0,2%* jumlah replikasi 3. Penelitian ini menggunakan analisis data secara deskriptif.

Hasil penelitian menunjukan daya hambat terhadap pertumbuhan *Streptococcus mutans* ATCC 25175 oleh ekstrak etanol daun ketul konsentrasi 1% sebesar 2,12mm ± 0,07, konsentrasi 1,5% sebesar 2,76mm ± 0,41, konsentrasi 2% sebesar 3,56mm ± 0,81 dan *Chlorhexidine gluconate 0,2%* sebesar 20,84 mm ± 0,28. Kesimpulan pada penelitian ini adalah daya hambat terhadap pertumbuhan *Streptococcus mutans* ATCC 25175 oleh *Chlorhexidine gluconate 0,2%* lebih besar dari ekstrak etanol daun ketul 1%, 1.5%, dan 2%.

Kata kunci: Ekstrak etanol daun ketul, Daya hambat, *Streptococcus mutans* ATCC 25175

ABSTRACT

Caries is a disease of the dental hard tissue that often occurs in children. Caries is caused by several factors such as host, microorganisms, substrate and time. One of the microorganisms that play a role in the occurrence of caries is Streptococcus mutans. Ketul leaves (Bidens Pilosa) contain phytochemical compounds, namely flavonoids, tannins, and saponins which have antibacterial effects. The purpose of this research was to determine the inhibition of 1%, 1.5%, 2% ethanol extract of ketul (Bidens pilosa) leaves on the growth of Streptococcus mutans ATCC 25175.

This type of research is laboratory experimental. The bacteria tested was Streptococcus mutans ATCC 25175. Streptococcus mutans ATCC 25175 was cultured first on Mueller hinton Agar (MHA) media. The inhibition test was carried out using Kirby-bauer disc diffusion by immersion in 1%, 1.5%, 2% ketul leaf ethanol extract and 0.2% chlorhexidine gluconate number of replications 3. This study used descriptive data analysis.

The results showed that the inhibition of Streptococcus mutans ATCC 25175 by the ethanol extract of ketul leaves at a concentration of 1% was 2.12mm ± 0.07, 1.5% concentration was 2.76mm ± 0.41, 2% concentration was 3.56mm ± 0.81 and 0.2% Chlorhexidine gluconate 20.84 mm ± 0.28. The conclusion of this study is that the inhibition of Streptococcus mutans ATCC 25175 by Chlorhexidine gluconate 0.2% is greater than the ethanol extract of ketul leaves 1%, 1.5% and 2%.

Keywords: Ketul leaf ethanol extract, Inhibition zone, Streptococcus mutans ATCC 25175