

**UJI AKTIVITAS ANTIBAKTERI EKSTRAK ETANOL RIMPANG TEMU
MANGGA (*Curcuma mangga* Val.) TERHADAP BAKTERI *Streptococcus
mutans***

Muhamad Dafa Fadila Ramadhan

Karies gigi merupakan penyakit jaringan keras gigi yang ditandai dengan terjadinya demineralisasi pada jaringan keras gigi yang kemudian diikuti oleh kerusakan bahan organiknya. *Streptococcus mutans* merupakan bakteri yang berperan dalam pembentukan plak penyebab karies. Rimpang temu mangga (*Curcuma mangga* Val.) diketahui memiliki aktivitas antibakteri. Penelitian ini bertujuan untuk mengetahui aktivitas antibakteri dari ekstrak etanol rimpang temu mangga (*Curcuma mangga* Val.) terhadap *Streptococcus mutans*. Penelitian ini merupakan penelitian eksperimental laboratorium menggunakan true experiment *post test only control group design* dengan metode difusi sumuran untuk menentukan diameter zona hambat. Ekstrak diperoleh dengan metode maserasi. Penelitian ini menggunakan ekstrak etanol rimpang temu mangga (*Curcuma mangga* Val.) dengan konsentrasi 20%, 40%, 60%, 80%, dan 100%, serta kontrol positif (klorheksidin) dan kontrol negatif (DMSO 10%). Data yang diperoleh dianalisis menggunakan uji *Kruskal-Wallis* yang dilanjutkan dengan uji *post hoc Mann-Whitney*. Hasil penelitian menunjukkan bahwa ekstrak etanol rimpang temu mangga (*Curcuma mangga* Val.) memiliki aktivitas antibakteri terhadap *Streptococcus mutans* dengan rata-rata diameter zona hambat paling baik sebesar $9,33 \pm 0,63$ mm pada konsentrasi 80%.

Kata kunci: Karies gigi, *Streptococcus mutans*, rimpang temu mangga (*Curcuma mangga* Val.), aktivitas antibakteri, zona hambat

ANTIBACTERIAL ACTIVITY OF ETHANOL EXTRACTS MANGO GINGER RHIZOME (*Curcuma mangga* Val.) AGAINST *Streptococcus mutans* BACTERIA

Muhamad Dafa Fadila Ramadhan

Dental caries is a disease of the hard tissues of the teeth which is characterized by demineralization of the hard tissues of the teeth which is then followed by the destruction of the organic matter. Streptococcus mutans is a bacterium that plays a role in the formation of caries-causing plaque. The rhizome of Intersection mango (Curcuma mango Val.) is known to have antibacterial activity. This study aimed to determine the antibacterial activity of the ethanol extract of the rhizome of Temu Mango (Curcuma mangga Val.) against Streptococcus mutans. This research is a laboratory experimental study using a true experiment post test only control group design with the well diffusion method to determine the diameter of the inhibition zone. The extract was obtained by maceration method. This study used the ethanol extract of the temu mango rhizome (Curcuma mango Val.) with concentrations of 20%, 40%, 60%, 80%, and 100%, as well as positive control (chlorhexidine) and negative control (DMSO 10%). The data obtained were analyzed using the Kruskal-Wallis test followed by the Mann-Whitney post hoc test. The results showed that the ethanol extract of the rhizome of Intersection of Mango (Curcuma mangga Val.) had antibacterial activity against Streptococcus mutans with the best average diameter of the inhibition zone of 9.33 ± 0.63 mm at a concentration of 80%.

Keywords: *Dental caries, Streptococcus mutans, mango ginger rhizome (Curcuma mangga Val.), antibacterial activity, inhibition zone*