

INTISARI

Saliva mempunyai peran penting dalam kesehatan jaringan lunak dan keras gigi, salah satunya untuk *buffering*. Kemampuan saliva sebagai *buffering* sangat penting untuk menjaga derajat keasaman (pH) dalam rongga mulut. Kemangi (*Ocimum sanctum L*) merupakan tanaman yang memiliki banyak manfaat. Kandungan flavonoid daun kemangi menyebabkan adanya rasa pahit dan kesat yang dapat memacu dan merangsang sekresi kelenjar saliva. Tujuan penelitian ini adalah untuk mengetahui efek bahan kumur rebusan daun kemangi konsentrasi 100% terhadap pH dan volume saliva.

Penelitian dilakukan pada 32 subjek yang dibagi menjadi dua kelompok secara acak masing-masing 16 orang. Kelompok perlakuan berkumur dengan 10 ml rebusan daun kemangi konsentrasi 100% sedangkan kelompok kontrol berkumur dengan akuades. Derajat keasaman saliva diukur dengan menggunakan pH meter sebelum berkumur, sesaat setelah berkumur, 15 menit setelah berkumur dan 30 menit setelah berkumur. Selanjutnya, data yang diperoleh dianalisis menggunakan uji *One way ANOVA* untuk mengetahui pengaruh antar kelompok, uji LSD untuk mengetahui keefektifan rebusan daun kemangi dan *Independent t-test* untuk mengetahui perbedaan rerata antar kelompok pada setiap perbedaan waktu ($p < 0,05$).

Hasil uji *One way ANOVA* menunjukkan bahwa rebusan daun kemangi secara signifikan berpengaruh pada pH saliva. Hasil uji LSD menunjukkan adanya perbedaan signifikan pada waktu sesaat setelah berkumur dan 15 menit setelah berkumur. Hasil uji *Independent t-test* menunjukkan bahwa adanya perbedaan signifikan pada pH saliva kelompok rebusan daun kemangi dan akuades pada setiap perbedaan waktunya. Disimpulkan bahwa rebusan daun kemangi efektif meningkatkan pH saliva hingga 15 menit setelah berkumur. Volume saliva setelah berkumur rebusan daun kemangi lebih tinggi daripada berkumur akuades.

Kata kunci : daun kemangi, rebusan, berkumur, pH saliva

ABSTRACT

Saliva has important roles in the health of soft and hard tissue of the teeth, one of them is for *buffering*. Its capability as *buffering* is very important to maintain acidity level (pH) in the mouth. Basil (*Ocimum sanctum L*) is a kind of plant that can be utilized as a stimulant for secretion of saliva (salivation). It contains flavonoid which has bitter and unsmooth taste. The aim of this study was to determine the effect of mouthwash made from boiled basil (100% concentration level) towards pH and volume of saliva.

This study was conducted on 32 subjects which were divided into two groups randomly whose each has 16 individuals. The treatment group gargled with 10 ml of decoction of basil leaves 100% concentration, while the control group gargled with distilled water. Acidity level of saliva measured by pH meter before gargling, a moment after gargling, 15 minutes after gargling, and 30 minutes after gargling. Moreover, the obtained data analyzed by *One Way Anova* test to examine the different effects between each group, *LSD* test to cognize the effectiveness of basil leaf decoction and *Independent t-test* to determine the mean differences between groups at each time difference ($p < 0,05$).

The result of *One Way Anova* test showed that the decoction of basil leaves significantly influence pH of saliva. Meanwhile, the result of *LSD* test showed there were significant differences between on the moment after gargling and 15 minutes after gargling. The result of *Independent t-test* showed there were significant differences in the salivary pH of the decoction of basil leaves and distilled water at each time difference. Conclusion of this study is the decoction of basil leaves is effective increasing pH saliva from a moment to 15 minutes after gargling. The volume of saliva after gargling decoction of basil leaves higher than distilled water.

Keyword: basil leaves, decoction, gargling, salivary pH