**FORMULASI *MOUTHWASH* SARI BUNGA KENANGA (*Cananga odorata* (Lamk.) Hook. F. & Thomson) DAN UJI AKTIVITAS ANTIBAKTERI TERHADAP *Streptococcus mutans* DAN SPESIMEN SALIVA**

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**ABSTRAK**

Halitosis adalah bau nafas tak sedap dari rongga mulut dapat disebabkan oleh karies gigi merupakan plak yang terbentuk pada permukaan gigi berisi bakteri. Bakteri yang sangat berperan dalam pembentukan plak gigi adalah *Streptococcus mutans.* Tujuan penelitian untuk mengetahui kandungan senyawa metabolit sekunder pada sari bunga kenanga dan mendapatkan sediaan *mouthwash* dari bahan alami dari sari bunga kenanga mempunyai aktivitas antibakteri dan rasional untuk menjaga kebersihan dan perawatan kesehatan mulut.

Sari bunga kenanga dipersiapkan dari bunga kenanga segar dengan pelarut akuades dan diuji skrining fitokimia serta aktivitas antibakteri terhadap *Streptococcus mutans.* Selanjutnya diformulasikan ke dalam sediaan *mouthwash* konsntrasi 30%, 40% dan 50% menggunakan formula dasar campuran gom arab, sorbitol, natrium benzoat, dan dilakukan pengujian mutu yaitu uji organoleptis dan kesukaan, pH, stabilitas dan aktivitas antibakteri dengan cara perhitungan angka lempeng total pada spesimen saliva sukarelawan sebelum dan setelah penggunaan sediaan

Hasil penelitian menunjukkan sari bunga kenanga mengandung alkaloid, flavonoid, saponin, tanin, steroid, glikosida, dan minyak atsiri serta mempunyai aktivitas antibakteri terhadap *Strptococcus mutans* paling kuat pada konsentrasi 50% dengan diameter zona hambat sebesar 21,50 ± 0,50 mm. Sari bunga kenanga yang diformulasikan dalam sediaan *mouthwash* memiliki pH antara 6,0 sampai 6,7 dan stabil pada penyimpanan selama 12 minggu. Dari tiga sediaan yang diformulasikan , sediaan dengan konsentrasi sari bunga kenanga 30% paling disukai panelis dengan sedikit aroma khas bunga kenanga, warna hijau pucat, serta rasa agak manis dan sedikit sepat. Sediaan yang mengurangi jumlah koloni bakteri dari saliva paling besar adalah konsentrasi 50% sebanyak 54,05 ± 2,24% hampir sama dengan sediaan komesial Listeri® yaitu 54,18 ± 4,68%.

**Kata Kunci :** *Bunga* *kenanga, mouthwash, antibakteri, Streptococcus mutans.*

***FORMULATION OF MOUTHWASH FROM CANANGA FLOWER WATER EXTRACT (Cananga odorata (Lamk.) Hook. F. & Thomson) AND ANTIBACTERIAL ACTIVITY TEST ON Streptococcus mutans AND SALIVA SPECIMENS***

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***ABSTRACT***

*Halitosis is a bad breath from the oral cavity can be caused by dental caries, which is plaque that forms on the surface of the teeth containing bacteria. The bacteria that play a very important role in the formation of dental plaque are Streptococcus mutans. The research objective were to determine the content of secondary metabolite compounds in cananga flower extract and to formulation mouthwash from kenanga flower water extracts that have antibacterial activity and rational activity to maintain hygiene and oral health care.*

*Cananga flower water extract was prepared from fresh cananga flowers with distilled water and tested for phytochemical screening and antibacterial activity against Streptococcus mutans. It was continued by formulated into a mouthwash with a concentration of 30%, 40% and 50% using the basic formula of a mixture of arabic gum, sorbitol, sodium benzoate. Quality test was conducted, namely organoleptic test and preference, pH, stability and antibacterial activity by calculating the total plate number at volunteer saliva specimens before and after using the mouthwash.*

*The results showed that cananga flower water extract contained alkaloids, flavonoids, saponins, tannins, steroids, glycosides, and essential oils and has the strongest antibacterial activity against Strptococcus mutans at a concentration 50% with an diameter of zone inhibition was 21.50 ± 0.50 mm. Cananga flower water extract formulated in to mouthwash have a pH between 6.0 to 6.7 and was stable for 12 weeks of storage. Based on preference test, the panelists preferred 30% kenanga flower water extract concentration, with a slight cananga flower aroma, pale green color, and slightly sweet and slightly tart taste. The greatest formulation that reduced the number of bacterial colonies from saliva was a 50% concentration was 54.05 ± 2.24%, of reduction almost the same as the Listeri® commercial preparation which was 54.18 ± 4.68%.*

**Keywords**: *cananga, flower, mouthwash, antibacterial, Streptococcus mutans.*