**FORMULASI SEDIAAN GARGARISMA DARI EKSTRAK ETANOL DAUN SALAM (*Syzygium polyanthum* (Wight) Walp.) DAN UJI AKTIVITAS ANTIBAKTERI TERHADAP SPESIMEN**

**SALIVA DAN *Streptococcus mutans***

# ABSTRAK

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 Gargarisma adalah sediaan berupa larutan, umumnya pekat harus diencerkan dahulu sebelum digunakan, manfaatnya sebagai pencegahan atau pengobatan infeksi tenggorokan. Tumbuhan salam merupakan salah satu jenis tumbuhan rempah-rempah, banyak dimanfaatkan sebagai bahan pelengkap dan penyedap alami pada masakan karena aromanya yang khas. Daun salam mengandung minyak atsiri dan berbagai senyawa metabolit sekunder diantaranya flavonoid, tanin, dan saponin berpotensi sebagai antibakteri. Tujuan penelitian ini adalah untuk mengetahui kandungan metabolit sekunder dan aktivitas antibakteri terhadap *Streptococcus mutans* dari ekstrak etanol daun salam, dan diformulasikan ke dalam sediaan gargarisma.

Pembuatan ekstrak etanol daun salam secara maserasi dengan pelarut etanol 80%. Skrining fitokimia dilakukan terhadap daun salam segar, simplisia dan ekstrak etanolnya. Uji aktivitas antibakteri ekstrak etanol daun salam terhadap *Streptococcus mutans* secara difusi agar. Ekstrak etanol daun salam diformulasikan ke dalam sediaan gargarisma dengan konsentrasi 2,5%, 5% dan 7,5%, dan dilakukan uji fisik sediaan dan uji aktivitas antibakteri terhadap specimen saliva secara perhitungan angka lempeng total.

Hasil penelitian menunjukkan daun salam segar, simplisia dan ekstrak etanolnya mengandung flavonoid, tanin, saponin, alkaloid, steroid, glikosida, dan minyak atsiri. Sediaan gargarisma yang diperoleh stabil pada penyimpanan 12 minggu, konsentrasi 5% dan 7,5% paling banyak disukai oleh panelis. Ekstrak etanol daun salam mempunyai aktvitas antibakteri terhadap *Streptococcus mutans* paling besar pada konsentrasi 500 mg/mL menghasilkan diameter hambatan (21,3±0,7) mm. Gargarisma yang diformulasikan menurunkan jumlah koloni bakteri pada spesimen saliva paling kuat pada konsentrasi 7,5% yaitu (43,37 ± 3,32) mm hampir sama dengan gargarisma Listerin (43,87 ± 6,89) mm.

**Kata Kunci :** *Daun salam, Gargarisma, Antibakteri, Streptococcus mutans, Spesimen Saliva.*

***THE FORMULATION OF GARGARISM PREPARATION FROM BAY LEAF ETHANOL EXTRACT (Syzygium polyanthum (Wight) Walp.) AND ANTIBACTERIAL TEST ACTIVITY ON SALIVA AND***

***Streptococcus mutants SPECIMENS***

***ABSTRACT***

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 *Gargarism is a preparation in the form of a solution, generally is diluted before use, the benefit is a prevention or treatment of throat infections. Bay plant is spice plant, widely used as a natural flavoring in cooking because of its distinctive aroma. Bay leaf contains essential oils and various secondary metabolite compounds such as flavonoids, tannins, saponins potentially as antibacterial. The objective of this research was to find out the secondary metabolite content and antibacterial activity againts Streptococcus mutants from bay leaf ethanol extract, and formulation into gargarism preparation.*

 *The bay leaf ethanol extract was manufactured in maceration with 80% ethanol solvent. Phytochemical screening was performed on fresh bay leaves, simplicia and its ethanol extract. The antibacterial activity test of bay leaf ethanol extract on Streptococcus mutants was done through diffusion in order. The ethanol extract of bay leaves was formulated into gargarism preparation with concentrations of 2.5%, 5% and 7.5%, and the physical tests of the preparations and antibacterial activity againts saliva specimens in the method of total plate numbers.*

 *The results showed that fresh bay leaf, simplicia and ethanol extract contain flavonoids, tannins, saponins, alkaloids, steroids, glycosides, and essential oils. Gargarism preparations obtained were stable for 12 weeks storage, concentrations of 5% and 7.5% were most preferred by panelists. Bay leaf ethanol extract has antibacterial activity on Streptococcus mutants at the largest concentration of 500 mg/mL produces a diameter of inhibition zone (21.3±0.7) mm. Gargarism formulated lowered the number of bacterial colonies in the most powerful saliva specimens at a concentration of 7.5% that is (43.37±3.32)% almost the same as listerin gargarism (43.87±6.89)%.*

***Keywords:*** *Bay leaf, Gargarism, Antibacterial, Streptococcus mutants, Saliva Specimen.*