

**EFEKTIVITAS EKSTRAK DAUN JAMBU AIR (*Syzygium aqueum*) DALAM  
MENGHAMBAT PERTUMBUHAN BAKTERI *Aggregatibacter*  
*Actinomycetemcomitans***

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**Abstrak**

**Latar Belakang:** Peranan bakteri *Aggregatibacter actinomycetemcomitans* dapat menyebabkan terjadinya periodontitis agresif. Bakteri tersebut menginfeksi jaringan periodontal dengan faktor virulensi yang dimilikinya. Pemberian antibakteri seperti obat kumur *chlorhexidin* merupakan salah satu perawatan untuk penyakit periodontal karena bakteri. Penggunaan *chlorhexidin* dalam jangka waktu panjang dapat menimbulkan iritasi mukosa mulut, sensasi mulut terbakar, perubahan persepsi rasa dan munculnya noda pada gigi. Salah satu alternatif adalah dengan berkumur ekstrak daun jambu air. Efek antibakteri ekstrak daun jambu air didapatkan dari senyawa kimia yang terkandung didalamnya yaitu *flavonoid*, *fenolik*, *alkaloid*, *etanol* dan *tannin*. **Tujuan:** Untuk mengetahui potensi dari ekstrak daun jambu air (*Syzygium aqueum*) dalam menghambat pertumbuhan bakteri *Aggregatibacter actinomycetemcomitans*. **Metode Penelitian:** Tinjauan pustaka dengan menelaah artikel penelitian yang didapatkan dari Science Direct dan Google Scholar dengan menggunakan kata kunci “*syzygium aqueum* dan *Aggregatibacter actinomycetemcomitans*”. **Hasil:** Daun jambu air mengandung banyak turunan senyawa seperti flavonoid, alkaloid, tannin, saponin, terpenoid. Kandungan senyawa tersebut dapat dijadikan antibakteri karena efektif dalam menghambat pertumbuhan bakteri. **Kesimpulan:** Ekstrak daun jambu air (*Syzygium aqueum*) dapat menghambat pertumbuhan bakteri *Aggregatibacter actinomycetemcomitans*.

**Kata kunci:** *syzygium aqueum*, *aggregatibacter actinomycetemcomitans*

**THE EXTRACTED JAVA LEAF EFFECTIVENESS (*Syzygium aqueum*) TO  
INHIBIT THE GROWTH OF *Aggregatibacter Actinomycetemcomitans***

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**Abstract**

**Background:** *Aggregatibacter actinomycetemcomitans* may cause aggressive periodontics. This bacterium infects the periodontal tissue with its virulent factors. The administration of antibacterial, such as *chlorhexidin* mouthwash, is for caring periodontal disease due to the *Aggregatibacter actinomycetemcomitans*. Long term usage of *chlorhexidin* may irritate the oral mucosa, trigger the sensation of inflammation inside the mouth, rise to the sense of taste changes, and lead to stains on teeth. An alternative for these problems is gargling with extracted Java Apple leaves. The antibacterials are from chemical substances, such as *flavonoids*, *phenolic*, *alkaloids*, *ethanol*, and *tannin*.

**Objectives:** This research aims to determine the potentials of extracted Java Apple leaves (*Syzygium aqueum*) in inhibiting the growth of *Aggregatibacter actinomycetemcomitans*

**Methodology:** This literature study was done by reviewing articles obtained from Science Direct and Google Scholar. The applied keywords were *Syzygium aqueum* and *Aggregatibacter actinomycetemcomitans*. **Results:** The Java Apple leaves have many derivatives, such as *flavonoids*, *phenolic*, *alkaloids*, *ethanol*, *saponin*, *terpenoids*, *tannin*.

The compounds content could be used as antibacterial because of their effectiveness to inhibit *Aggregatibacter actinomycetemcomitans* growth. **Conclusion:** The extracted Java Apple leaves (*Syzygium aqueum*) can inhibit the growth of *Aggregatibacter actinomycetemcomitans*.

**Keywords:** *Syzygium aqueum*, *aggregatibacter actinomycetemcomitans*