

**EFEKTIVITAS EKSTRAK DAUN UNGU (*Graptophyllum pictum* (L.) Griff) DALAM MENGHAMBAT PERTUMBUHAN BAKTERI *Porphyromonas gingivalis* (In vitro).**

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**Abstrak**

**Latar Belakang :** Periodontitis merupakan suatu penyakit periodontal berupa inflamasi kronis ataupun akut pada jaringan penyangga gigi yang disebabkan oleh bakteri. Salah satu bakteri penyebab periodontitis adalah *Porphyromonas gingivalis*. Perawatan periodontitis dapat dilakukan dengan pemberian antibiotik metronidazol dan kombinasinya, tetapi penggunaan jangka waktu lama dapat mengakibatkan resisten terhadap tubuh. Bahan alternatif diperlukan seperti ekstrak daun ungu (*Graptophyllum pictum* (L.) griff) memiliki kandungan zat aktif flavonoid, tanin, saponin, steroid, antrakuinon, dan glikosida yang dapat digunakan sebagai antibakteri. **Tujuan :** Penelitian ini bertujuan untuk mengetahui efektivitas ekstrak daun ungu (*Graptophyllum pictum* (L.) griff) dalam menghambat pertumbuhan bakteri *Porphyromonas gingivalis*. **Metode :** Penelitian ini adalah penelitian eksperimental laboratorium dengan rancangan *post test only control group design*. Penelitian ini terdiri dari 5 kelompok perlakuan ekstrak daun ungu dengan konsentrasi 6,25%, 12,5%, 25%, 50%, 100% dan 1 kelompok kontrol Metronidazol. Zona hambat diukur menggunakan jangka sorong, kemudian data dianalisis dengan uji *Kruskal wallis* dan *Mann Whitney*. **Hasil Penelitian :** Hasil penelitian menunjukkan adanya zona hambat ekstrak daun ungu konsentrasi 6,25%, 12,5%, 25%, 50%, 100%. Hasil uji *Kruskal wallis* didapatkan nilai signifikansi  $p= 0,001$ , sehingga dapat dinyatakan bahwa ekstrak daun ungu (*Graptophyllum pictum* (L.) griff) memiliki pengaruh daya hambat terhadap pertumbuhan bakteri *Porphyromonas gingivalis*. **Kesimpulan :** Ekstrak daun ungu (*Graptophyllum pictum* (L.) griff) efektif dalam menghambat pertumbuhan bakteri *Porphyromonas gingivalis*.

**Kata Kunci :** Daun ungu, Daya hambat bakteri, *P. gingivalis*.

**THE EFFECTIVITY OF PURPLE LEAF EXTRACT (*Graphophyllum pictum* (L.) griff)  
TO INHIBIT THE GROWTH OF *Porphyromonas gingivalis* (in vitro)**

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**Abstract**

**Background:** Periodontitis is a periodontal disease as a chronic or acute inflammation that caused by bacteria. One of the bacteria that caused periodontitis is *Porphyromonas gingivalis*. Administration of Metronidazole antibiotics can be used for periodontitis treatment, but long usage of Metronidazole can make bacteria resistant in body. Purple leaf extract (*Graphophyllum pictum* (L.) griff) can be an alternative material, because it contain antibacterial composition such as flavonoid, tanin, saponin, steroid, antrakuinon, dan glikosida. **Objective:** This study was aimed to know the effectiveness of the Purple leaf extract (*Graphophyllum pictum* (L.) griff.) to inhibit the growth of *Porphyromonas gingivalis*. **Methods:** This research was experimental laboratorium research that planned on post test only control group design. This experimental divided into five treatment groups were given puple leaf extract with 6,25%, 12,5%, 25%, 50%, 100% concentration, also one control group that given metronidazol antibiotics. Zone of inhibition measured by calipers then the result was analyzed by using Kruskal Wallis and Mann Whitneytest. **Result:** The results showed that there were inhibition zone from purple leaf extract groups with 6,25%, 12,5%, 25%, 50%, 100% concentration. Kruskal Wallis showed the significant number (p= 0,001). Purple leaf extract (*Graphophyllum pictum* (L.) griff.) effective to inhibit the growth of *Porphyromonas gingivalis*. **Conclusion:** Purple leaf extract (*Graphophyllum pictum* (L.) griff.) effective to inhibit the growth of *Porphyromonas gingivalis*.

**Keywords:** Purple leaf extract, zone of inhibition