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**AKTIVITAS ANTIBAKTERI SEDIAAN SABUN PADAT EKSTRAK  
BUAH PARIJOTO (*Medinilla speciosa* Blume) TERHADAP  
*Propionibacterium acnes***

**ABSTRAK**

**Latar Belakang:** Prevalensi jerawat akibat *Propionibacterium acnes* cukup tinggi, berkisar antara 47-90% selama masa remaja. Buah Parijoto (*Medinilla speciosa* Blume) memiliki senyawa flavonoid, tanin, saponin yang memiliki aktivitas antibakteri sehingga buah parijoto berpotensi dikembangkan sebagai sabun padat antibakteri. Tujuan penelitian ini adalah mengetahui stabilitas fisik dan menganalisis aktivitas antibakteri sabun padat ekstrak buah parijoto.

**Metode:** Penelitian dilakukan secara eksperimental dengan metode difusi cakram terhadap *Propionibacterium acnes* menggunakan 5 kelompok perlakuan. Kontrol positif sabun JF Sulfur, kontrol negatif basis sabun, formula I konsentrasi 0,5%, formula II konsentrasi 1%, formula III konsentrasi 1,5%. Aktivitas antibakteri ditunjukkan dengan adanya zona hambat disekitar cakram. Uji stabilitas fisik sabun padat ekstrak buah parijoto dilihat dari uji organoleptis, homogenitas, uji pH, uji kadar air dan uji tinggi busa.

**Hasil:** Pada uji organoleptis, homogenitas, pH, kadar air, dan tinggi busa menunjukkan sabun padat ekstrak buah parijoto stabilitasnya tidak berbeda signifikan sebelum dan sesudah uji *cycling test* selama 5 siklus. Aktivitas antibakteri buah parijoto dalam formulasi sabun padat terhadap *Propionibacterium acnes* menunjukkan bahwa kontrol negatif tidak memiliki aktivitas antibakteri, aktivitas antibakteri yang kuat terdapat pada konsentrasi 0,5%, 1% dan 1,5%. Diameter zona hambat formula I 10,18 mm, formula II 15,08 mm, formula III 15,85 mm termasuk kategori kuat, dimana formula III memiliki zona hambat yang berbeda signifikan dibandingkan dengan kontrol positif.

**Kesimpulan:** Sabun padat ekstrak buah parijoto memiliki stabilitas fisik yang baik dan diameter zona hambat yang termasuk kategori kuat.

**Kata kunci:** Buah parijoto, sabun padat antibakteri, *Propionibacterium acnes*

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## **ANTIBACTERIAL ACTIVITY OF PARIJOTO FRUIT EXTRACT SOLID SOAP (*Medinilla speciosa* Blume) AGAINST *Propionibacterium acnes***

### **ABSTRACT**

**Background:** The prevalence of acne due to *Propionibacterium acnes* is quite high, ranging from 47-90% during adolescence. Parijoto fruit (*Medinilla speciosa* Blume) has flavonoids, tannins, and saponins which have antibacterial activity so Parijoto fruit has the potential to be developed as an antibacterial solid soap. The purpose of this study was to analyze the antibacterial activity and to determine the physical stability of the soap and compounds that have the potential to an antibacterial in the Parijoto fruit extract solid soap.

**Methods:** The study was conducted experimentally using the disc diffusion method against *Propionibacterium acnes* using 5 treatment groups. Positive control for JF Sulfur soap, negative control for soap base, formula I with a concentration of 0.5%, formula II with a concentration of 1%, and formula III with a concentration of 1.5%. Antibacterial activity is indicated by the presence of an inhibition zone around the disc. The physical stability test of solid soap Parijoto fruit extract was seen from the organoleptic test, homogeneity, pH test, water content test, and foam height test.

**Results:** In the organoleptic test, homogeneity, pH, water content, and foam height showed that the stability of the solid soap Parijoto fruit extract was not significantly different before and after the cycling test for 5 cycles. The antibacterial activity of Parijoto fruit in the solid soap formulation against *Propionibacterium acnes* showed that the negative control did not have antibacterial activity, strong antibacterial activity was present at concentrations of 0.5%, 1%, and 1.5%. The diameter of the inhibition zone of formula I was 10.18 mm, formula II was 15.08 mm, and formula III was 15.85 mm which was included in the strong category, where formula III had a significantly different inhibition zone compared to the positive control.

**Conclusion:** Parijoto fruit extract solid soap has good physical stability and the diameter of the inhibition zone is included in the strong category.

**Keywords:** Parijoto fruit, antibacterial solid soap, *Propionibacterium acnes*