**FORMULASI SEDIAAN SABUN CAIR ANTIBAKTERI SARI**

**AIR DAUN TEMBELEKAN (*Lantana camara* L.*)* DAN UJI AKTIVITAS ANTIBAKTERI TERHADAP**

***Staphylococcus aureus* DAN SPESIMEN AIR CUCI TANGAN SUKARELAWAN**

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## ABSTRAK

Mikroorganisme penyebab penyakit seringkali menempel pada tangan. Cara paling mudah untuk membersihkannya dengan mencuci tangan menggunakan sabun antiseptik yang saat ini banyak beredar di pasaran. Namun sabun dengan kandungan bahan aktif sintetik sering menimbulkan kulit kering maka perlu dicari antiseptik dari bahan alam yang rasional dan relatif aman. Salah satu tanaman mempunyai aktivitas antibakteri adalah daun tembelekan (*Lantana camara* L.) karena mengandung flavonoid, tanin, saponin, dan minyak atsiri. Berdasarkan hal ini dilakukan skrining fitokimia dan memformulasikan sari daun tembelekan ke dalam sediaan sabun cair, serta melakukan uji aktivitas antibakteri.

Penelitian dilakukan skrining fitokimia dan formulasi sari daun tembelekan ke dalam sabuncairkonsentrasi10%,20%dan30%.Ujievaluasisediaansabuncairmeliputiuji*cycling test*,tinggibusa,pH,bobotjenis,viskositas,iritasi,*hedonic*danujiaktivitasantibakteridengan metode difusi agar terhadap bakteri *Staphylococcus aureus*, dan spesimen air cuci tangan sukarelawan dengan metode hitung angka lempengtotal.

Hasil skrining fitokimia menunjukkan bahwa sari daun tembelekan mengandung senyawagolonganalkaloid,flavonoid,tanin,saponin,steroid/triterpenoiddanglikosida.Hasil ujisediaanmemenuhisyaratyaitustabildenganuji*cyclingtest,*pH8,2-9,1,bobotjenis1,0-1,8 g/mL, tinggi busa 17-45 mm, mempunyai aktivitas antibakteri terhadap *Staphylococcus aures* dengandiameterhambatanpadakonsentrasi10%13,40mm,20%14,13mmdan30%16,23mm termasuk kategori kuat dan persentase pengurangan jumlah koloni bakteri pada spesimen air cucitangankonsentrasi10%sebesar26,03%;konsentrasi20%sebesar40,63%dankonsentrasi 30% sebesar 77,61 %.

**Kata Kunci :** *daun, Lantana camara L., sabun cair, antibakteri, Staphylococcus aureus.*

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# FORMULATION OF ANTI-BACTERIAL LIQUID SOAP FROM TEMBELEKAN LEAVES(*Lantana camara*L.*)*AND ANTI-

# BACTERIAL TEST AGAINTS *Staphylococcus aureus*

# AND WATER SPECIMENS OF WASHING

# HANDFROM VOLUNTEERS

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## ABSTRACT

Microorganisms that can cause disease oftenly that patchon the hands. One of the easiest waystoreduceitwaswashinghandsbyantisepticsoap,that currentlyavailable inthemarket.However, antiseptic agent from sintetic compound could cause dry skin so we need to find an antiseptic from natural sources where are rational and relatively safe. One of plants that has activities as antibacterial was Tembelekan leaf (*Lantana camara* L.) because it contained flavonoids, tannins, saponins, and essential oils. Based on the fact, researchers did phytochemical screening and formulated juice of tembelekan Leaves into liquid soap.

TheresearchconductedphytochemicalscreeningandformulationofTembelekanleafinto liquid soap with concentration of 10%, 20% and 30%. Evaluation tests for liquid soap included*cycling test*, foams height, pH, specific gravity, viscosity, irritation, *hedonic,* antibacterial activitytestwithagardisc’sdiffusionmethodagaints*Staphylococcusaureus*andTotalPlateCount test with specimen from volunteer handwashingwater.

The results of phytochemical screening show that juice of Tembelekan leaves contained alkaloids, flavonoids, tannins, saponins, steroids/triterpenoids and glycosides. The results of formulationaddfulfillingrequirementsthat’sstablewitha*cyclingtest*,pH8,2-9,1,density1,0- 1,08g/mL,foamsheight17-45mm,activitiesofantibacterialagaints*Staphylococcusaures*with diameter of zone inhibition concentrations of 10% is 13.40 mm, 20% is 14.13 mm and 30%is16.23mmallofthemwascategorizedasstrongandpercentagereductionofbacteriainvolunteer handwashing water specimens concentrations of 10% is 26.03%, concentrations of 20% is 40.63% and consentrations of 30% is77.61%.

**Keywords** : *leaf, Lantana camara L., liquid soap, antibacterial, Staphylococcus aureus*