

INTISARI

DEWI, MULYA, 2017, UJI AKTIVITAS KRIM KOMBINASI EKSTRAK ETANOL DAUN SIRSAK (*Annona muricata* L.) DAN ETANOL DAUN SIRIH (*Piper betle* L.) TERHADAP BAKTERI *Staphylococcus epidermidis* SECARA *in vivo*, SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Daun sirsak (*Annona muricata* L.) dan daun sirih (*Piper betle* L.) memiliki aktivitas antibakteri terhadap *Staphylococcus epidermidis*. Senyawa kimia yang terkandung dalam kedua tanaman ini yang memiliki aktivitas antibakteri yaitu flavonoid, tanin, dan saponin. Tujuan dari penelitian ini adalah untuk mengetahui kemampuan sediaan krim kombinasi ekstrak etanol daun sirsak dan daun sirih dalam menyembuhkan jerawat akibat infeksi *Staphylococcus epidermidis*, mengetahui konsentrasi efektif sediaan krim yang dapat menyembuhkan jerawat karena infeksi *Staphylococcus epidermidis*, mengetahui efek farmakologi sediaan krim, serta untuk mengetahui stabilitas sediaan krim selama masa penelitian.

Ekstraksi dalam penelitian ini menggunakan metode maserasi dengan pelarut etanol 70%. Parameter krim ekstrak daun sirsak dan daun sirih yang diamati adalah konsentrasi kombinasi ekstrak dan waktu penyimpanan selama 21 hari. Pengamatan waktu penyembuhan dilakukan dengan mengamati lamanya penyembuhan jerawat punggung kelinci setelah pemberian krim, ditandai dengan hilangnya jerawat (pustula) dan nanah. Data yang diperoleh dianalisis dengan ANOVA satu jalan (signifikan $p < 0,05$).

Hasil penelitian menunjukkan krim ekstrak etanol daun sirsak dan daun sirih memiliki aktivitas antibakteri terhadap *Staphylococcus epidermidis* dengan konsentrasi efektifnya yaitu perbandingan ekstrak daun sirsak 1,25 g dan ekstrak daun sirih 0,5 g. Stabilitas krim kombinasi ekstrak etanol daun sirsak dan daun sirih memiliki stabilitas krim yang baik.

Kata kunci : Sirsak (*Annona muricata* L.), Sirih (*Piper betle* L.), antibakteri, krim, *Staphylococcus epidermidis*, jerawat.

ABSTRACT

DEWI, MULYA, 2017, ANTIBACTERIAL ACTIVITY TEST OF CREAM COMBINATION OF SOURSOP (*Annona muricata* L.) LEAVES ETHANOL EXTRACT WITH BETEL (*Piper betle* L.) LEAVES ETHANOL EXTRACT AGAINST *Staphylococcus epidermidis* *In vivo*, SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Soursop leaves (*Annona muricata* L.) and betel leaves (*Piper betle* L.) have antibacterial activity against *Staphylococcus epidermidis*. Chemical compounds contained in both of these plants that have antibacterial activity are flavonoids, tannins, and saponins. The purpose of this research was to know the ability of cream combination of ethanol extract of soursop leaves and betel leaves in curing acne due to infection of *Staphylococcus epidermidis*, to know the effective concentration of cream combination which could cure acne due to *Staphylococcus epidermidis* infection, to know the pharmacology effect of cream combination, and to know the stability of cream preparations during the research.

Extraction in this research used maceration method with 70% ethanol as the solvent. The parameters of soursop leaves extract and betel leaves extract were being observed were concentration of extract combination and storage time for 21 days. The healing time was observed by observing the duration of healing of rabbit's back acne after giving cream, characterized by the loss of acne (pustules) and pus. The data which obtained were analyzed by one-way ANOVA (significant $p < 0.05$).

The results showed that ethanol extract cream of soursop leaves and betel leaves had antibacterial activity against *Staphylococcus epidermidis* with effective concentration ratio of soursop leaves extract was 1.25 g and betel leaves extract was 0.5 g. The stability of cream combination of ethanol extract of soursop leaves and betel leaves had good cream stability.

Keywords : Soursop leaves (*Annona muricata* L.), betel leaves (*Piper betle* L.), antibacterial, cream, *Staphylococcus epidermidis*, acne.