

ABSTRAK

Ekstrak Biji Buah salak mengandung senyawa flavonoid, alkaloid, dan tanin yang berperan penting sebagai penangkal radikal bebas. Penelitian ini bertujuan untuk mengetahui perbedaan nilai SPF dari ketiga formula gel *sunprotection* ekstrak biji buah salak (*Salacca zalacca* (Gaertn.) Vos.). metode yang digunakan dalam penelitian ini adalah penelitian pra eksperimental dengan rancangan *one shot case study* dengan menerapkan rancangan dasar berupa rancangan acak lengkap (RAL), untuk mengetahui perbedaan nilai SPF dari ketiga formula gel Sunprotection ekstrak biji buah salak meliputi T₂₄ : 24 jam waktu maserasi, T₄₈ : 48 jam waktu maserasi dan T₇₂ : 72 jam waktu maserasi dengan konsentrasi ekstrak sebesar 0,5%. Gel Sunprotection ekstrak biji buah salak diuji meliputi uji organoleptik, homogenitas, daya sebar daya lekat, pH, viskositas, dan nilai *Sun protection Factor* (SPF). Hasil dari penelitian menunjukkan bahwa gel sunprotection ekstrak biji salak berwarna kuning bening, bau khas biji buah salak, dan berbentuk semi solid. Pada pengujian homogenitas, viskositas, daya sebar, daya lekat dan pH telah memenuhi syarat sediaan gel yang baik. Nilai *Sun Protection Factor* (SPF) gel *sunprotetion* ekstrak biji buah salak pada sediaan T₂₄ sebesar 3,30 (proteksi minimal), sediaan T₄₈ sebesar 4,04 (proteksi sedang) dan T₇₂ sebesar 8,68 (proteksi maksimal). dari hasil penelitian dapat disimpulkan bahwa ketiga formula memenuhi persyaratan karakteristik sifat fisika dan kimia yaitu organoleptis, homogenitas, daya sebar, daya lekat, pH dan viskositas, serta memiliki nilai SPF pada T₂₄, T₄₈, dan T₇₂ sebesar 3,30, 4,04, dan 8,68.

Kata Kunci : Ekstrak Biji Buah Salak, Gel *Sunprotection*, dan nilai *Sun Protection Factor* (SPF)

ABSTRACT

*Salak fruit seed extract contains flavonoid compounds, alkaloids, and tannins that play an important role as an antidote to free radicals. This study aims to determine the difference in the SPF value of the three sunprotection gel formulas from the seed extract of salak fruit (*Salacca zalacca* (Gaertn.) Vos.). The method used in this research is a pre-experimental study with a one shot case study design by applying a basic design in the form of a completely randomized design (CRD), to determine the difference in SPF values of the three Sunprotection gel formulas of salak fruit seed extract including T24: 24 hours maceration time, T48 : 48 hours of maceration time and T72 : 72 hours of maceration time with an extract concentration of 0.5%. Sunprotection gel of salak fruit seed extract was tested including organoleptic test, homogeneity, adhesion dispersion, pH, viscosity, and value of Sun protection Factor (SPF). The results of the study showed that the sunprotection gel of salak seed extract was clear yellow, had a characteristic odor of salak fruit seeds, and was in semi-solid form. In the homogeneity test, viscosity, dispersion, adhesion and pH have met the requirements of a good gel preparation. The value of Sun Protection Factor (SPF) of the gel sun protection of salak fruit seed extract in T24 preparations was 3.30 (minimum protection), T48 preparations were 4.04 (moderate protection) and T72 was 8.68 (maximum protection). From the results of the study it can be concluded that the three formulas meet the requirements for the characteristics of physical and chemical properties, namely organoleptic, homogeneity, spreadability, adhesion, pH and viscosity, and have SPF values at T24, T48, and T72 of 3.30, 4.04, and 8.68.*

Keywords : *Salak Fruit Seed Extract, Gel Sunprotection, and value of Sun Protection Factor (SPF)*