

ABSTRAK

RARA, D.P., 2024. UJI AKTIVITAS DAN FORMULASI SEDIAAN ESSENCE DARI *Saccharomyces Rice Ferment Filtrate* (SRFF) SEBAGAI ANTI-AGING SECARA IN VIVO. Dibimbing oleh Dr. apt. OPSTARIA SAPTARINI, M.Si. dan Dra. Apt. SUHARTINAH, M.Sc.

Saccharomyces Rice Ferment Filtrate (SRFF) merupakan nasi yang difermentasikan menggunakan ragi instan. Filtrat SRFF mengandung fenolik dan alkaloid yang diformulasikan menjadi *essence* yang berpotensi sebagai *anti-aging*. Penelitian ini bertujuan mengetahui konsentrasi formula *essence SRFF* terbaik sebagai *anti-aging*.

Proses fermentasi nasi dengan ditambahkan ragi *Saccharomyces cerevisiae*. Hasil uji mutu fisik fermentasi nasi meliputi, uji organoleptis, pH, dan suhu. Hasil fermentasi dibuat sediaan *essence* dengan konsentrasi bahan aktif yang digunakan SRFF 5% masa inkubasi 1 hari dan SRFF 10% masa inkubasi 3 hari. Pengujian mutu fisik sediaan *essence* meliputi uji organoleptis, homogenitas, pH, viskositas, dan stabilitas. Pengujian aktivitas *anti-aging* sediaan *essence* pada punggung kelinci *New Zealand* menggunakan alat *skin analyzer* dengan parameter konsentrasi kolagen, elastisitas, dan kelembaban. Hasil analisis data mutu fisik sediaan dan *anti-aging* dianalisis dengan metode ANOVA dan *paired t-test*.

Berdasarkan hasil pengujian mutu fisik sediaan *essence*, menunjukkan sediaan *essence* 5% memiliki uji mutu fisik yang baik sesuai rentang syarat uji. Berdasarkan hasil pengujian aktivitas *anti-aging* menggunakan alat *skin analyzer*. Konsentrasi yang paling efektif yaitu sediaan *essence* 5%, karena dengan dosis kecil sudah memberikan aktivitas sebagai *anti-aging*. Kesimpulan yang didapat pada penelitian ini, sediaan *essence* 5% memiliki mutu fisik dan aktivitas yang terbaik.

Kata Kunci : *Anti-aging, Essence, In vivo, SRFF, Xantan gum*

ABSTRACT

RARA, D.P., 2024. ACTIVITY TEST AND FORMULATION OF ESSENCE AIDE FROM *Saccharomyces Rice Ferment Filtrate (SRFF)* AS ANTI-AGING IN VIVO. Supervised by Dr. apt. OPSTARIA SAPTARINI, M.Si. and Dra. apt. SUHARTINAH, M.Si.

Saccharomyces Rice Ferment Filtrate (SRFF) is rice fermented using instant yeast. *SRFF* filtrate contains phenolics and alkaloids that are formulated into essence which has the potential as *anti-aging*. This study aims to determine the best concentration of *SRFF* essence formula as *anti-aging*.

The process of rice fermentation by adding *Saccharomyces cerevisiae* yeast. The results of the physical quality test of rice fermentation include organoleptic, pH, and temperature tests. The results of fermentation are made essence preparations with the concentration of active ingredients used *SRFF* 5% incubation period of 1 day and *SRFF* 10% incubation period of 3 days. Physical quality testing of essence preparations includes organoleptical, homogeneity, pH, viscosity, and stability tests. Testing the anti-aging activity of essence preparations on the back of New Zealand rabbits using a skin analyzer with parameters of collagen concentration, elasticity, and moisture. The results of the physical quality and anti-aging data analysis were analyzed using ANOVA and paired t-test methods.

Based on the results of physical quality testing of *essence* preparations, it shows that 5% *essence* preparations have a good physical quality test according to the range of test requirements. Based on the results of *anti-aging* activity testing using a *skin analyzer*. The most effective concentration is 5% *essence* preparation, because with a small dose it already provides *anti-aging* activity. The conclusion obtained in this study, 5% *essence* preparation has the best physical quality and activity.

Keywords : *Anti-aging, Essence, In vivo, SRFF, Xantan gum*