ABSTRAK

WAHYU ARIYANA, 2026. UJI AKTIVITAS ANTI-AGING MINYAK BULUS (*Amyda cartilaginea* Boddaert) PADA KULIT PUNGGUNG KELINCI *NEW ZEALAND,* SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA. Dibimbing oleh Dr. apt. Opstaria Saptarini, M.Si. dan apt. Dra. Suhartinah, M.Sc.

Paparan UV-A dapat menyebabkan percepatan proses penuaan kulit yang menyebabkan kerusakan kolagen dan elastin serta menurunkan kelembapan kulit, sehingga memicu terbentuknya keriput, kekenduran, dan kulit kering. Minyak bulus (*Amyda cartilaginea*) telah lama digunakan secara tradisional dan diyakini memiliki potensi sebagai agen anti-aging alami. Penelitian ini bertujuan untuk mengetahui efek anti-aging minyak bulus terhadap kulit punggung kelinci New Zealand yang diinduksi paparan UV-A.

Penelitian ini menggunakan desain eksperimental dengan pemberian minyak bulus pada konsentrasi 12,5%, 25%, 50%, dan 100%. Parameter yang diamati meliputi kadar kolagen, elastisitas, dan kelembapan kulit yang diukur menggunakan skin analyzer. Pengukuran dilakukan pada tahap sebelum perlakuan (T0), setelah induksi UV-A (T1), serta setelah aplikasi minyak bulus selama 14 hari (T2) dan 30 hari (T3).

Hasil penelitian menunjukkan bahwa seluruh konsentrasi minyak bulus mampu meningkatkan kadar kolagen, elastisitas, dan kelembapan kulit, dengan hasil paling optimal pada konsentrasi 12,5%. Uji statistik Paired T-Test menunjukkan adanya perbedaan yang signifikan antara kondisi sebelum dan sesudah perlakuan. Dengan demikian, minyak bulus berpotensi dikembangkan sebagai agen anti-aging alami, dengan konsentrasi 12,5% sebagai yang paling efektif.

Kata kunci: Minyak bulus, anti aging, *skin analyzer*, kelinci *New Zealand*.

ABSTRACT

WAHYU ARIYANA, 2026. ANTI-AGING ACTIVITY TEST OF *Amyda cartilaginea* Boddaert OIL ON NEW ZEALAND RABBIT BACK SKIN, UNDERGRADUATE THESIS, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY, SURAKARTA. Supervised by Dr. apt. Opstaria Saptarini, M.Si. and apt. Dra. Suhartinah, M.Sc.

UV-A exposure can accelerate the skin aging process, causing collagen and elastin damage and reducing skin moisture, leading to wrinkles, sagging, and dryness. Soft-shelled turtle (*Amyda cartilaginea*) oil has long been used traditionally and is believed to have potential as a natural anti-aging agent. This study aimed to determine the anti-aging effects of soft-shelled turtle oil on the back skin of New Zealand rabbits induced by UV-A exposure.

This study used an experimental design, with soft-shelled turtle oil administered at concentrations of 12.5%, 25%, 50%, and 100%. Parameters observed included collagen levels, elasticity, and skin moisture, measured using a skin analyzer. Measurements were taken before treatment (T0), after UV-A induction (T1), and after soft-shelled turtle oil application for 14 days (T2), and 30 days (T3).

The results showed that all soft-shelled turtle oil concentrations increased collagen levels, elasticity, and skin moisture, with the most optimal results at a concentration of 12.5%. A paired t-test showed a significant difference between pre- and post-treatment conditions. Thus, turtle oil has the potential to be developed as a natural anti-aging agent, with a concentration of 12.5% being the most effective.

Keywords: Bulus oil, anti-aging, skin analyzer, New Zealand rabbits.