

ABSTRAK

SULFIANI. *Formulasi dan Uji Stabilitas Fisika Sediaan Lulur Dari Tepung Cangkang Telur Bebek (*Anas platyrhynchos domesticus*)* (dibimbing oleh Nurmaya Effendi dan Hamsinah).

Lulur adalah produk perawatan tubuh yang dapat membantu menghilangkan sel kulit mati dan sejenisnya dari kulit. Salah satu senyawa yang terkandung dalam cangkang telur adalah CaCO_3 , dimana senyawa ini memiliki fungsi dalam proses regenerasi sel, mengatur pigmentasi kulit serta membuat kulit lebih putih dan cerah. Penelitian ini bertujuan untuk mengetahui pengaruh konsentrasi dari penambahan cangkang telur bebek terhadap sifat fisik sediaan lulur. Dalam penelitian ini, tiga variasi konsentrasi tepung cangkang telur bebek (15%, 25%, 35%) dibuat dan diuji sifat dan stabilitas fisiknya (organoleptik, pH, daya sebar, daya lekat, tipe krim, dan viskositas) dalam kondisi dipercepat selama 12 hari (6 siklus) pada suhu 40°C dan 4°C . Hasil penelitian kami menunjukkan bahwa formula lulur berbasis tepung cangkang telur bebek memiliki pH sebesar 5 – 6; homogen; daya sebar sebesar $2,5333 \pm 0,04$ – $3,6333 \pm 0,05$ cm; daya lekat $2,9133 \pm 0,04$ – $5,6933 \pm 0,33$ detik; tipe emulsi minyak dalam air; viskositas sebesar $21.222 \pm 192,25$ – $86.111 \pm 5102,74$ cP. Meskipun demikian, sifat organoleptik ketiga formula tersebut tidak stabil karena terjadi perubahan warna, bau dan stabilitas selama pengujian dengan sistem penyimpanan dipercepat. Sehingga kami tetap perlu mengoptimasi sifat fisika kimia formula lulur berbahan dasar tepung cangkang telur bebek.

Kata Kunci : Lulur, Cangkang Telur Bebek (*Anas platyrhynchos domesticus*), Kalsium Karbonat, Kosmetik.

ABSTRACT

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SULFIANI. *Formulation and Physical Stability Test of Scrub Preparations from Duck Egg Shell Flour (*Anas platyrhynchos domesticus*)* (Supervised by Nurmaya Effendi and Hamsinah).

Scrub is a body care product that can help remove dead skin cells and the like from the skin. One of the compounds contained in egg shells is CaCO_3 , where this compound has a function in the cell regeneration process, regulates skin pigmentation and makes skin whiter and brighter. This study aims to determine the effect of the concentration of the addition of duck egg shells on the physical properties of scrub preparations. In this research, three variations of duck egg shell flour concentration (15%, 25%, 35%) were prepared and tested for their physical properties and stability (organoleptic, pH, spreadability, adhesion, cream type, and viscosity) under accelerated conditions for 12 days (6 cycles) at 40°C and 4°C . The results show that the scrub formula based on duck egg shell powder has a pH of 5 – 6; homogeneous; spreadability of 2.5333 ± 0.04 – 3.6333 ± 0.05 cm; adhesion 2.9133 ± 0.04 – 5.6933 ± 0.33 seconds; oil-in-water emulsion type; viscosity of 21.222 ± 192.25 – 86.111 ± 5102.74 cP. However, the organoleptic properties of the three formulas were unstable due to changes in color, odor and stability during testing with an accelerated storage system. So further research is expected to optimize the physico-chemical properties of the scrub formula made from duck egg shell flour.

Keywords: *Scrub, Duck Eggshell (*Anas platyrhynchos domesticus*), Calcium Carbonate, Cosmetics.*

