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**FORMULASI KRIM MINYAK BIJI LABU KUNING (*Cucurbita moschata*)
SEBAGAI KRIM ANTIOKSIDAN PENCEGAH *ANTIAGING***

ABSTRAK

Latar Belakang: Minyak biji labu kuning memiliki kandungan senyawa metabolit yang dapat digunakan sebagai sediaan *antiaging* akibat paparan sinar UV. Minyak biji labu kuning dapat diformulasikan sebagai sediaan kosmetika *antiaging*. Tujuan penelitian ini menganalisis aktivitas antioksidan minyak biji labu kuning dan memformulasikan minyak biji labu kuning sebagai sediaan krim antioksidan pencegah *antiaging*.

Metode Penelitian: Penelitian ini merupakan penelitian eksperimental dengan pembuatan minyak biji labu kuning menggunakan metode soxhletasi. Formula dibuat dalam 3 seri dengan konsentrasi minyak biji labu kuning yang diformulasikan dalam sediaan krim, F1 2,5%, F2 5% dan F3 10% kemudian diuji mutu fisiknya saat awal dan setelah *cycling test* meliputi organoleptis, homogenitas, pH, daya sebar, daya lekat dan viskositas. Analisis data antioksidan minyak biji labu kuning dilakukan secara deskriptif dengan mendeskripsikan data kemudian diolah dan dianalisis untuk menggambarkan data yang telah terkumpul. Analisis data mutu fisik sediaan krim menggunakan *ANOVA* satu jalan dengan melakukan pengujian hipotesis perbedaan rata-rata kelompok sampel.

Hasil Penelitian: Minyak biji labu kuning memiliki nilai IC_{50} 108,602 ppm dan mengandung senyawa metabolit flavonoid, saponin dan terpenoid. Pengujian mutu fisik sediaan krim secara organoleptis, krim bentuk semi padat, berwarna putih, berbau khas basis krim. Sediaan krim memiliki rentang pH $7,23 \pm 0,039$ - $7,83 \pm 0,022$, rentang daya sebar $5,4 \pm 0,261$ cm - $6,6 \pm 0,125$ cm, rentang daya lekat $3,3 \pm 0,471$ detik - $4,6 \pm 0,471$ detik dan rentang viskositas $7,626 \pm 150,85$ cps - $9,120 \pm 481,11$ cps.

Kesimpulan: Minyak biji labu kuning memiliki aktivitas antioksidan kategori sedang dengan nilai IC_{50} 108,602 ppm. Sediaan krim minyak biji labu kuning memenuhi persyaratan mutu fisik.

Kata Kunci: minyak biji labu, krim, antioksidan.

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**FORMULATION OF PUMPKIN SEED OIL CREAM (*Cucurbita moschata*)
AS ANTIAGING CREAM CANDIDATE**

ABSTRACT

Background: Pumpkin seed oil contains metabolite compounds that can be used as *anti-aging* preparations due to UV light exposure. Pumpkin seed oil can be formulated as an *antiaging* cosmetic preparation. The purpose of this study was to analyze the antioxidant activity of pumpkin seed oil and formulate pumpkin seed oil as an *anti-aging preventive antioxidant cream preparation*.

Research Method: This research is an experimental study with the manufacture of pumpkin seed oil using the soxhletation method. The formula is made in 3 series with a concentration of pumpkin seed oil formulated in cream preparations, F1 2.5%, F2 5% and F3 10% then tested for physical quality at the beginning and after *cycling tests* including organoleptic, homogeneity, pH, dispersion, adhesion and viscosity. The analysis of pumpkin seed oil antioxidant data was carried out descriptively by describing the data and then processed and analyzed to describe the data that had been collected. Analysis of physical quality data of cream preparations using *one-way ANOVA* by testing the hypothesis of the difference in the average sample group.

Research Results: Pumpkin seed oil has an IC value of 50 108.602 ppm and contains metabolites of flavonoids, saponins and terpenoids. Physical quality testing of organoleptic cream preparations, semi-solid cream, white in color, smells typical of cream base. The cream preparation has a pH range of 7.23 ± 0.039 - 7.83 ± 0.022 , a dispersion range of 5.4 ± 0.261 cm - 6.6 ± 0.125 cm, an adhesion range of 3.3 ± 0.471 sec - 4.6 ± 0.471 sec and a viscosity range of 7.626 ± 150.85 cps- 9.120 ± 481.11 cps.

Conclusion: Pumpkin seed oil has moderate antioxidant activity with an IC value of 50 108.602 ppm. The creamy preparation of pumpkin seed oil meets the physical quality requirements.

Keywords: pumpkin seed oil, cream, antioxidant.