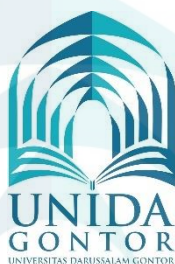


THESIS

**FORMULATION AND PHYSICAL QUALITY EVALUATION TEST OF
FACE CREAM FROM JUWET FRUIT EXTRACT (*Syzigium cumini* L)**



Compiled by:

Friska Yulia Suherman

NIM 422021118059

**PHARMACY STUDY PROGRAM
FACULTY OF HEALTH SCIENCES
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PONOROGO
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Yulisa Raras Dewi**

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ABSTRAK
FORMULASI DAN UJI EVALUASI MUTU FISIK KRIM WAJAH DARI
EKSTRAK BUAH JUWET (*Syzygium cumini* (L))

Friska Yulia Suherman

422021118059

Buah juwet (*Syzygium cumini* L) merupakan tanaman dengan kandungan senyawa bioaktif seperti flavonoid, tanin, alkaloid, dan saponin yang berpotensi sebagai antioksidan, antibakteri, dan pelembap kulit. Penelitian ini bertujuan untuk membuat formulasi sediaan krim wajah dengan zat aktif ekstrak buah juwet serta melakukan evaluasi mutu fisiknya. Penelitian ini menggunakan metode eksperimental dengan variasi konsentrasi ekstrak buah juwet 2%, 3%, dan 4%. Ekstrak buah juwet diperoleh melalui metode maserasi menggunakan pelarut etanol 70%. Evaluasi mutu fisik krim meliputi uji organoleptik, pH, homogenitas, viskositas, daya lekat, dan daya sebar. Hasil uji menunjukkan bahwa semua formula memiliki warna coklat, tekstur lembut, dan aroma khas ekstrak buah juwet. Nilai pH berada pada rentang 7,03–8,77, hasil nilai dari viskositas 2227.6 cps–4019.4 cps. Daya lekat berkisar antara 2–4 detik, dengan daya sebar pada nilai 5–7 cm berdasarkan dari penelitian ini adalah krim wajah dengan ekstrak buah juwet telah memenuhi standar sediaan mutu fisik. Penelitian ini diharapkan dapat menjadi referensi dalam pengembangan kosmetik berbahan alami dengan potensi antioksidan dan pelembap. Hasil analisis statistik menggunakan SPSS ver 16.0 menunjukkan pada uji pH, daya lekat, daya lekat dan dan viskositas menunjukkan hasil ($P > 0,05$) yang menandakan hasil tidak signifikan atau tidak ada perbedaan yang jauh antara formula. Dan pada uji pH pada uji Analisis data yang dilakukan yaitu uji normalitas, yang menghasilkan nilai ($p < 0,05$). Hal ini menunjukkan bahwa hasil yang di dapatkan signifikan, yang artinya bahwa data pada uji pH tidak terdistribusi merata, sehingga uji dilanjutkan dengan uji *oneway* ANOVA.

Kata Kunci: Ekstrak, juwet, krim, viskositas

ABSTRACT
FORMULATION AND EVALUATION TEST OF PHYSICAL QUALITY
OF FACE CREAM FROM JUWET FRUIT EXTRACT (*Syzygium cumini*
(L)

Friska Yulia Suherman

422021118059

Juwet fruit (*Syzygium cumini* L) is a plant with bioactive compounds such as flavonoids, tannins, alkaloids, and saponins that have the potential to be antioxidants, antibacterials, and skin moisturizers. This study aims to make a formulation of face cream preparations with active substances of juwet fruit extract and evaluate its physical quality. This study used an experimental method with variations in the concentration of juwet fruit extract of 2%, 3%, and 4%. Juwet fruit extract is obtained through the maceration method using 70% ethanol solvent. Evaluation of the physical quality of the cream includes organoleptic tests, pH, homogeneity, viscosity, adhesion, and spreadability. The test results showed that all formulas had a brown color, a soft texture, and a distinctive aroma of juwet fruit extract. The pH value is in the range of 7.03–8.77, the result of the value of viscosity is 2227.6 cps-4019.4 cps. The adhesion ranges from 2-4 seconds, with a dispersion value of 5-7 cm based on this study is that face cream with juwet fruit extract has met the standards of physical quality preparations. This research is expected to be a reference in the development of natural cosmetics with antioxidant and moisturizing potential. The results of statistical analysis using SPSS ver 16.0 showed that the pH, adhesion, adhesion and viscosity test showed a result ($P > 0.05$) which indicated that the results were not significant or there was no significant difference between the formulas. And in the pH test, the data analysis test was carried out, namely the normality test, which produced a value ($p < 0.05$). This shows that the results obtained are significant, which means that the data in the pH test is not evenly distributed, so the test is continued with the ANOVA oneway test.

Keywords: Extract, juwet, cream, viscosity

VALIDITY SHEET

VALIDITY SHEET

It is hereby stated that the thesis with the title:

**FORMULATION TEST AND PHYSICAL QUALITY EVALUATION OF JUWET
(Syzgium cumin) FRUIT EXTRACT FACIAL CREAM**

Written:

**Friska Yulia Suherman
NIM 422021118059**

Has been tested and approved & before the Thesis Examiner Board

On:

Examiner Board:

Supervisor I

Anggun Mahirotun Nur Sholikhah M.Farm
NIDN. 0716089501



Supervisor II

Yulisa Raras Dewi
NIY. 180709



Examiner

Apt. Satwika Budi Sawitri M.Farm
NIDN. 0721118402



Aproved by,

Head of Pharmacy Department
Faculty of Health Science, University of Darussalam Gontor



Apt. Nadia Iha Fatihah, M.Clin.Pharm.
NIDN. 0714059105

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AUTHENTICITY STATEMENT

AUTHENTICITY STATEMENT

It is hereby declared by,

Nama : Friska Yulia Suherman
NIM : 422021118059
Fakultas : Ilmu Kesehatan
Program studi : Farmasi
Judul penelitian : FORMULASI DAN UJI EVALUASI MUTU FISIK KRIM WAJAH DARI
EKSTRAK BUAH JUWET (*Syzgium cumini L*)

I sincerely declare that the research contained in this thesis is my own work and does not belong to anyone else. This thesis has never been published before, except for some parts with original references.

If in the future it is found that this work is plagiarism, I am ready to be given administrative and academic sanctions.

Ponorogo, 10th March 2025

Writer,



Friska Yulia Suherman
NIM. 422021118059

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FOREWORD

Assalamualaikum warrahmtullahi wabarakatuh

Alhamdulillah rabbil'alam, all praise be to Allah SWT, the Lord of the universe who has given Grace and Guidance as well as useful knowledge so that he can complete his thesis with the title "Formulation and Evaluation Test of Physical Quality of Face Cream from Juwet Fruit Extract (*Syzygium cumini* (L))". Prayers and greetings are constantly extended to the Prophet Muhammad PBUH, along with his family and companions who are role models for mankind. The thesis was prepared as one of the requirements for doing the final project in the Strata-1 program at the Pharmacy Study Program, Faculty of Health Sciences, Universitas Darussalam Gontor. The author realizes that the preparation of this thesis cannot be completed without the help, guidance and encouragement of various parties. Therefore, on this occasion the author would like to express his sincere gratitude to:

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Wassalamualaikum warahmatullahi wabarakatuh.

