

**THESIS**

**EFFECT OF VARIATIONS CONCENTRATION OF ARECA  
SEED EXTRACT (*Areca catechu L.*) IN FACIAL SERUM GEL  
PREPARATIONS ON ANTIOXIDANT ACTIVITY**




**Compiled By:**

**Brillian Sindi Agustin  
422021718023**

**DEPARTMENT OF PHARMACY  
FACULTY OF HEALTH SCIENCES  
UNIVERSITY OF DARUSSALAM GONTOR  
PONOROGO  
2024**

## VALIDITY SHEET

 **UNIDA**  
جامعة دار السلام كوتنور  
UNIVERSITY OF DARUSSALAM GONTOR

**Faculty of Health**  
كلية العلوم الصحية

**LEMBAR PENGESAHAN  
UJIAN SKRIPSI**

Dengan ini dinyatakan bahwa skripsi dengan judul:

**"PENGARUH VARIASI KONSENTRASI EKSTRAK BIJI PINANG (*Areca catechu*  
L.) PADA SEDIAAN GEL SERUM WAJAH TERHADAP AKTIVITAS  
ANTIOKSIDAN"**

Oleh:

**Brilliant Sindi Agustin**  
NIM 422021718023

Telah diuji dan disahkan dihadapan

**Dewan Penguji Skripsi**

Pada hari: Tanggal:

**Dewan Penguji**

**Pembimbing I**  
apt. Satwika Budi Sawitri, M.Farm  
NIDN. 210827

**Pembimbing II**  
Yulisa Raras Dewi, M.Farm  
NIY. 180709

**Penguji**  
Indriyanti Widyaratna, M.Farm  
NIDN. 071311960

**Mengetahui,**  
**Ketua Program Studi Farmasi**  
**Fakultas Ilmu Kesehatan, Universitas Darussalam Gontor**

apt. Nadia Iha Fatihan, M.Clin.Pharm  
NIDN. 0714059105

UNIVERSITAS DARUSSALAM GONTOR

No. Seri: 646/RJ-UNIDA/TU/12/2024



RUMAH JURNAL  
UNIVERSITAS DARUSSALAM GONTOR

# Sertifikat Bebas Plagiasi

Sertifikat ini diberikan kepada :

*Brillian Sindi Agustin*

Judul Skripsi:

Effect of Variations in Concentration of Areca Seed  
Extract (Areca Catechu L.) in Facial Serum Gel  
Preparations on Antioxidant Activity

Telah dideteksi tingkat plagiasinya dengan TURNITIN  
dan dinyatakan BEBAS PLAGIASI dengan kriteria  
toleransi  $\leq 25\%$  pada tanggal 2 Desember 2024



Ponorogo, 2 Desember 2024



Al-Ustadz Muhammad Taqiyuddin, M.Ag

UNIVERSITAS DARUSSALAM GONTOR

## AUTHENTICITY STATMENT

### PERNYATAAN KEASLIAN PENELITIAN

Dengan ini saya,

Nama : Brillian Sindi Agustin  
NIM : 422021718023  
Fakultas : Ilmu Kesehatan  
Program Studi : Farmasi  
Judul Penelitian : Pengaruh Variasi Konsentrasi Ekstrak Biji Pinang (*Areca catechu L.*) Pada Sediaan Gel Serum Wajah Terhadap Aktivitas Antioksidan

Saya dengan tulus menyatakan bahwa penelitian yang tersusun dalam skripsi ini aslinya adalah karya saya sendiri dan bukan peneliti lain untuk derajat yang berbeda. Lebih lanjut, skripsi ini tidak pernah diterbitkan sebelumnya, kecuali beberapa bagian referensi aslinya.

Apabila dikemudian hari ditemukan bahwa karya ini adalah plagiat, saya siap diberikan sanksi secara administrasi dan akademis.

Ponorogo, 1 Januari 2025  
Peneliti,



Brillian Sindi Agustin  
NIM. 422021718023

UNIDA  
GONTOR  
UNIVERSITAS DARUSSALAM GONTOR

## ACKNOWLEDGMENT

*Assalamualaikum Warahmatullahi Wabarakatuh*

Alhamdulillah rabbil'alamin, praise be to Allah SWT who has given grace and guidance, along with the blessing of knowledge so that the author can complete the and guidance, along with the blessing of knowledge so that the author can complete the thesis as expected. Shalawat and salam are poured out to the great prophet Muhammad SAW, along with his family and friends who have struggled to convey the path that is blessed by Allah. strive to convey the path blessed by Allah SWT. Thesis entitled 'The Effect of Variation in Concentration of Areca nut Extract (*Areca catechu L.*) On the Preparation of Facial Serum Gel Towards Antioxidant Activity' was prepared as one of the requirements in completing the final assignment in the Bachelor programme programme at the Department of Pharmacy, Faculty of Health Sciences, Universitas Darussalam Gontor.

The author would like to express his deepest gratitude to various parties who have provided assistance, guidance, and encouragement so that this thesis can be completed.

1. Prof. Dr Hamid Fahmi Zarkasyi, M.A., M.Phil., as the Rector of Universitas Darussalam Gontor. Dr Abdul Hafidz Zaid, M.A., as the Vice Rector I of Darussalam Gontor University. Dr Setiawan Bin Lahuri, M.A., as Vice Rector II of Darussalam Gontor University. Dr Khoirul Umam, M.Ec., as the Vice Rector III of Darussalam Gontor University.
2. apt. Amal Fadholah, S.Si, M.Si., as the Dean of the Faculty of Health Sciences and apt. Nadia Iha Fatihah, M.Clin.Pharm, as the head of the Pharmacy Study Programme at Darussalam Gontor University.
3. apt. Satwika Budi Sawitri, M.Farm, as the main supervisor and Yulis Raras Dewi, M.Farm, as the second supervisor who has provided knowledge, taken the time, guided, and provided direction and advice during the preparation of the thesis proposal so that it can be completed properly.

4. All lecturers, laboratory assistants, teaching staff and administration of the Pharmacy Study Programme who have shared their knowledge, guided and provided direction during the lecture process.
5. My parents, Mr Sulaiman and Mrs Emi Listianik, who have struggled and provided moral and financial support, and prayed for the success, success and blessing of the author's knowledge.
6. Bani Haidar who always encourages and always wakes up in the morning to study until the end of this semester. Celine Erva, my thesis partner who always struggled together in completing this task, and friends in room 213 GBB and Vanessa Shinta who always accompanied me in times of joy and sorrow in working on this thesis.
7. For my fellow comrades in the Pharmacy Study Programme class of 2021, especially Pharmacy A, who have struggled for 4 years to achieve their goals and friends in the Virtuous class.

The author realises that there are still many shortcomings and limitations in writing the thesis proposal. Therefore, the author expects constructive criticism and suggestions from all parties so that this thesis proposal can be better. Hopefully this thesis can benefit and inspire the readers *Aamiin Ya Rabbal Alamin*.

Ngawi, December 2024

Author

Brilliant Sindi Agsutin

UNIDA  
GONTOR  
UNIVERSITAS DARUSSALAM GONTOR