

**THESIS**

**EFFECTIVENESS OF *Ananas comosus* (L.) AND *Nigella sativa*  
IN REDUCING DYSMENORRHEA AND IMPROVING  
QUALITY OF LIFE**



**Compiled By:**

**Irma Fitria Anastasia**

**NIM 432022718038**

**DEPARTMENT OF PHARMACY  
FACULTY OF HEALTH SCIENCES  
UNIVERSITAS DARUSSALAM GONTOR**

**PONOROGO**

**2025**

**UNIVERSITAS DARUSSALAM GONTOR**

## APPROVAL SHEET

### LEMBAR PERSETUJUAN SEMINAR PROPOSAL SKRIPSI

Dengan ini dinyatakan bahwa proposal skripsi dengan judul:  
**UJI EFEKTIVITAS JUS NANAS (*Ananas Comusus L*) DAN  
HABBATUSSAUDA (*Nigella Sativa*) UNTUK MENURUNKAN  
DISMENORE DAN MENINGKATKAN KUALITAS HIDUP PADA  
REMAJA PUTRI**

Disusun oleh:  
**Irma Fitria Anastasia**  
NIM 432022718038

Telah dibaca dengan saksama dan telah dianggap memenuhi standar ilmiah, baik  
jangkauannya maupun kualitasnya.

Telah disetujui untuk diujikan pada tanggal: \_\_\_\_\_

#### Pembimbing I

Ai- Ustadzah Nurul Marfu'ah, S.Si, M.Si

NIDN. 0715078505

#### Pembimbing II

Ai- Ustadzah apt. Nadia Iha Fatimah M. Clin Pharm

NIDN. 0714059105

Ketua Program Studi Farmasi

FIK UNIDA Gontor

UNIDA  
GONTOR  
UNIVERSITAS DARUSSALAM GONTOR

apt. Nadia Iha Fatimah M.Clin Pharm

NIDN. 0714059105

# APPROVAL SHEET

## LEMBAR PERSETUJUAN LAPORAN KEMAJUAN SKRIPSI

Dengan ini dinyatakan bahwa skripsi dengan judul:

**“ UJI EFEKTIFITAS JUS NANAS (*Ananas Comusus L*) DAN  
HABBATUSSAUDA (*Nigella Sativa*) UNTUK MENURUNKAN DISMENORE  
DAN MENINGKATKAN KUALITAS HIDUP”**

Disusun Oleh:

**Irma Fitria Anastasia**  
**NIM 432022718038**

Telah dibaca dengan seksama dan telah dianggap memenuhi standar ilmiah, baik  
jangkauannya maupun kualitasnya

Telah disetujui dan diujikan pada tanggal: 14 Agustus 2025

**Pembimbing I**

Nurul Marfu'ah, S.Si, M.Si  
NIDN. 0715078505



**Pembimbing II**

apt. Nadia Iha Fatihah, M.Clin.Pharm  
NIDN: 0714059105



*Mengetahui,*

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



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

# APPROVAL SHEET THESIS DEFENCE

## APPROVAL SHEET THESIS DEFENCE

It is hereby stated that the thesis with the title:

**Effectiveness Test of Pineapple Juice (*Ananas Comusus L*) and  
Habbatussauda (*Nigella Sativa*) to Reduce Dysmenorrhea and Improve  
Quality of Live**

Written by:

**Irma Fitria Anastasia  
NIM 432022718038**

It has been reviewed and recommended to meet scientific standards, in terms of both scope and quality.

It has been approved to presented on:.....

**Supervisor 1**

Nurul Marfu'ah, S.Si, M.Si.  
NIDN. 0715078505



**Supervisor 2**

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



Head of Pharmacy Department

Faculty of Health Science, University of Darussalam Gontor



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

## ABSTRACT

The prevalence of dysmenorrhea in Indonesia is reported to be around 64.25%, which is within the range of 60–75% among adolescents. The use of NSAIDs may cause side effects involving the gastrointestinal, renal, and cardiovascular systems. The content of thymoquinone in black cumin and the enzyme bromelain in pineapple can act as analgesics. The purpose of this study was to determine the effectiveness of pineapple juice and black cumin in reducing dysmenorrhea and improve quality of life. This experimental study involved menstruating women experiencing dysmenorrhea. There are 3 treatment groups, namely: JNH1 = pineapple (100%), JNH2 = Black cumin 2 capsules (600 mg/capsule), JNH3 = Combination of pineapple juice (100%) and black cumin 2 capsules (600 mg/capsule), as well as a negative control in the form of mineral water and a positive control in the form of ibuprofen 200 mg. Treatment was given to 30 respondents. Data analysis was performed using one-way ANOVA with SPSS 16.0 and a significance level of 95%. The results of the study for the length of healing days were as follows: JNH 3 (1.83 days), JNH 2 (2.16 days), JNH 1 (2.33 days), KP (2.5 days), and KN (3.33 days). The decrease in pain scores after 3 days was JNH 3 (2.77), JNH 2 (2.89), JNH 1 (3.11), KP (3.66), and KN (4.58). Improvement in quality of life was observed in JNH 3 (80), JNH 1 (75.72), JNH 2 (71.5), KP (69.32), and KN (60.76). This study concludes that pineapple juice and Black Seed (*Nigella sativa*) can accelerate healing time and reduce menstrual pain, although the results are not statistically significant ( $p > 0.05$ ). Pineapple and black seed (*Nigella sativa*) juice may improve the quality of life for menstruating women experiencing dysmenorrhea, although the results are not statistically significant ( $p > 0.05$ ).

**Keywords:** black seed, dysmenorrhea, pain scale, pineapple juice, quality of life



## ACKNOWLEDGEMENT

Assalamualaikum Warahmatullahi Wabarakatuh.

All praise and gratitude go to Allah SWT, who has bestowed His grace and guidance upon us all so that the author can complete this thesis titled "Test of the Effectiveness of Pineapple Juice (*Ananas comosus* L.) and Black Seed (*Nigella sativa*) to Reduce Dysmenorrhea and Improve Quality of Life." Blessings and peace be upon the Prophet Muhammad SAW, whose intercession we always await on the Day of Judgment. The writing of this thesis is a requirement for obtaining a Bachelor of Pharmacy (S. Farm) degree in the Pharmacy Study Program, Faculty of Health Sciences, Darussalam Gontor University.

In writing this thesis, the author received much help, guidance, encouragement, and support from various parties. On this occasion, the author would like to express his gratitude to:

1. Prof. Dr. Hamid Fahmi Zarkasyi, M.A., M.Phil., as the Rector of Darussalam Gontor University, Dr. Abdul Hafidz Zaid, M.A., as 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 Vice Rector III of Darussalam Gontor University, and Dr. Royyan Ramdhani Djayusman, M.A., Ph.D., as Vice Rector IV of Darussalam Gontor University.
2. Apt. Amal Fadholah, M.Si., as Dean of the Faculty of Health Sciences at Darussalam Gontor University, and apt. Nadia Iha Fatihah, M.Clin. Pharm., as Head of the Pharmacy Study Program at Darussalam Gontor University.
3. Nurul Marfu'ah, S.Si., M.Si, as the first supervisor, and Apt. Nadia Iha Fatihah, M.Clin. Pharm., as the second supervisor, has guided and provided suggestions, enabling the author to complete this thesis.
4. Anugerah Suciati, M.Farm., as the examiner, took the time to provide valuable input in refining this thesis.
5. All lecturers, especially those in the Pharmacy Study Program, who shared their knowledge during my time at UNIDA Gontor.

6. My beloved mother, siblings, and extended family have supported me in reaching this point. Thank you for your prayers, love, patience, sincerity, attention, and support, both materially and spiritually, which have enabled me to complete my final assignment.
7. My fellow students from the Pharmacy Undergraduate Program, Class of 2022, who have always been with me through thick and thin for four years, providing input, encouragement, and support until this research is complete.
8. All female students are willing to serve as respondents and participate in this research.

May Allah SWT bless us all with His guidance. The author recognizes that this thesis is not perfect. Therefore, the author welcomes constructive criticism and suggestions from others. Finally, the author hopes this thesis will be accepted and contribute to the advancement of science, especially in the field of pharmacy.

Ponorogo, 18 Agustus 2025



Irma Fitria Anastasia  
NIM. 432022718038

UNIDA  
GONTOR  
UNIVERSITAS DARUSSALAM GONTOR