



**DETERMINATION OF TOTAL PHENOLIC CONTENT OF
JASMINE (*Jasminum Sambac* (L.) Ait.) EXTRACT in ACNE
PATCH PREPARATION**

THESIS

**To fulfil the requirements in completing Bachelor of Pharmacy Degree
Program**

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**PROGRAM STUDI FARMASI
FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM
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BANJARBARU
OCTOBER 2023**

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STATEMENT

I hereby declare that in this thesis there is no work that has ever been submitted to obtain a graduate degree at a university, and to the best of my knowledge there is also no work or opinion that has ever been written or published by anyone else, except for those written as referred to in this manuscript and mentioned in the bibliography.

Banjarbaru, October 2023

A handwritten signature in black ink, appearing to read "Spallera", written in a cursive style.

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ABSTRACT

DETERMINATION OF TOTAL PHENOLIC CONTENT OF JASMINE (*JASMINUM SAMBAC*) EXTRACT IN ACNE PATCH PREPARATION (By Olivia B. Pallera ; Advisor: Mia Fitriana, Prima Happy Ratnapuri; 2023; 88 pages)

Jasmine (*Jasminum sambac*) leaves were recognized for multipurpose use, the scent of jasmine could reduce stress and depression/anxiety, it has antiseptic, antibacterial, antifungal and effective treatment for skin irritations. Acne were a inflammatory skin disorder caused by *P.acnes* that can appear in a variety of ways, from little blemishes to obvious cysts. Some acne treatment may differ, depending to the type of acne treatment that may use such as retinoid drugs, antibiotic and azelaic and salicylic acid. Acne patch use hydrocolloid-producing chemicals. Hydrogel patches can kill acne-causing bacteria, medicated acne patches were also known as hydrogel patches. This study was conducted to determine the total phenolic content it in *Jasminum Sambac* extract in acne patch preparations. The research method began with preparation of sample simplicia. Preparation of Jasmine leaf ethanol extract, preparation of three acne patch formulations with various concentration of 25%, 30%, 35%. Folin-ciocalteau phenol reagent was used to determine the phenolic substances present in the patch preparation and gallic acid as the standard was used. The results showed that the average of total phenolic content of *J. sambac* extracts in acne patch preparation was 72.018mgGAE/patch in formula I; formula II has 74.951 mgGAE/patch and Formula III has 82.240 mgGAE/patch. The conclusion obtained in this study is that the higher extract in the patch the higher the concentration of the total phenolic content.

Keywords: Acne Patch, Folin-Ciocalteau, *Jasminum Sambac*, Total Phenolic

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The author realizes that there are still many shortcomings in this thesis, but the author hopes that this thesis can be useful for the development of science.

Banjarbaru, October 2023

Author

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