

# **THE STUDY OF ANTIBACTERIAL ACTIVITY OF WATER EXTRACT OF BUTTERFLY PEA (*Clitoria ternatea*) SEEDS**

By

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Revised after thesis defense

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### STATEMENT BY THE AUTHOR

I hereby declare that this submission is my own work and to the best of my knowledge, contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgement is made in the thesis.

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## ABSTRACT

### THE STUDY OF ANTIBACTERIAL ACTIVITY OF WATER EXTRACT OF BUTTERFLY PEA (*Clitoria ternatea*) SEEDS

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Food-Borne diseases are still a major problem to the world, even in developed country, for example according to WHO, Salmonellosis which caused by *Salmonella* is one of the most common food-borne disease that made millions of cases every year worldwide (WHO, 2005). The purpose of this research was to determine the antibacterial activity of water extract of the Butterfly Pea (*Clitoria ternatea*) seeds against *Staphylococcus aureus*, *Listeria monocytogenes*, and *Salmonella typhimurium*. The methodology used to determine the antibacterial activity on tested bacteria was disk-diffusion by measuring the diameter of zone of inhibition. The result of this research was the positive antibacterial activity from mature seed extract as growth inhibitor on *Salmonella typhimurium* with diameter of inhibition zone as big as  $3.331 \text{ mm} \pm 1.942$ .

*Keywords: butterfly pea, antibacterial activity, Salmonella typhimurium*

## DEDICATION

I dedicate this thesis to my family and friends. Without their loves and supports, this thesis cannot be finished.



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This is one of obligation for all eight semester students of Swiss German University (SGU) as partial fulfillment of the requirements for the Bachelor Degree.

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5. Beloved parents who had given the biggest support, both material and non-material. Dear friends, I love you guys.

Author realized that this thesis was still far from perfect. Therefore, any comments or critics would be really appreciated.

Finally, to all readers, Author hoped that this thesis could give positive contributions for academic purpose also general society.

Jakarta, July 2011

Maria Grace Jessica Kesumah

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