

**THE INVESTIGATION OF THE EFFECT OF BUTTERFLY PEA ROOT
EXTRACT ON THE ACTIVITY OF ACETYLCHOLINESTERASE ENZYME IN
ANIMAL MODEL**

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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, it 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

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On the past study, it has been proved that butterfly pea root extract could increase learning and memory in animal test subject. This research was a part of a continuity of the past study as it aimed to investigate the effect of butterfly pea root extract on the concentration of acetylcholinesterase enzyme which might be a reason of incremental effect in learning and memory in past study.

Butterfly pea root was administrated to test subjects which were not induced with scopolamine and were induced with scopolamine. In test subjects without scopolamine, butterfly pea root extract showed no significant changes between control and treatment groups. In test subjects induced with scopolamine, after 6 days treatment the concentration of acetylcholinesterase enzyme showed significant difference between control groups and treatment groups. In conclusion, the concentration of acetylcholinesterase enzyme in test subject which weren't induced by Scopolamine showed no significant changes after 14 days treatment with butterfly pea root extract with certain dosages. The concentration of acetylcholinesterase enzyme in test subject which were induced by Scopolamine showed significant changes after treatment with butterfly pea root extract.

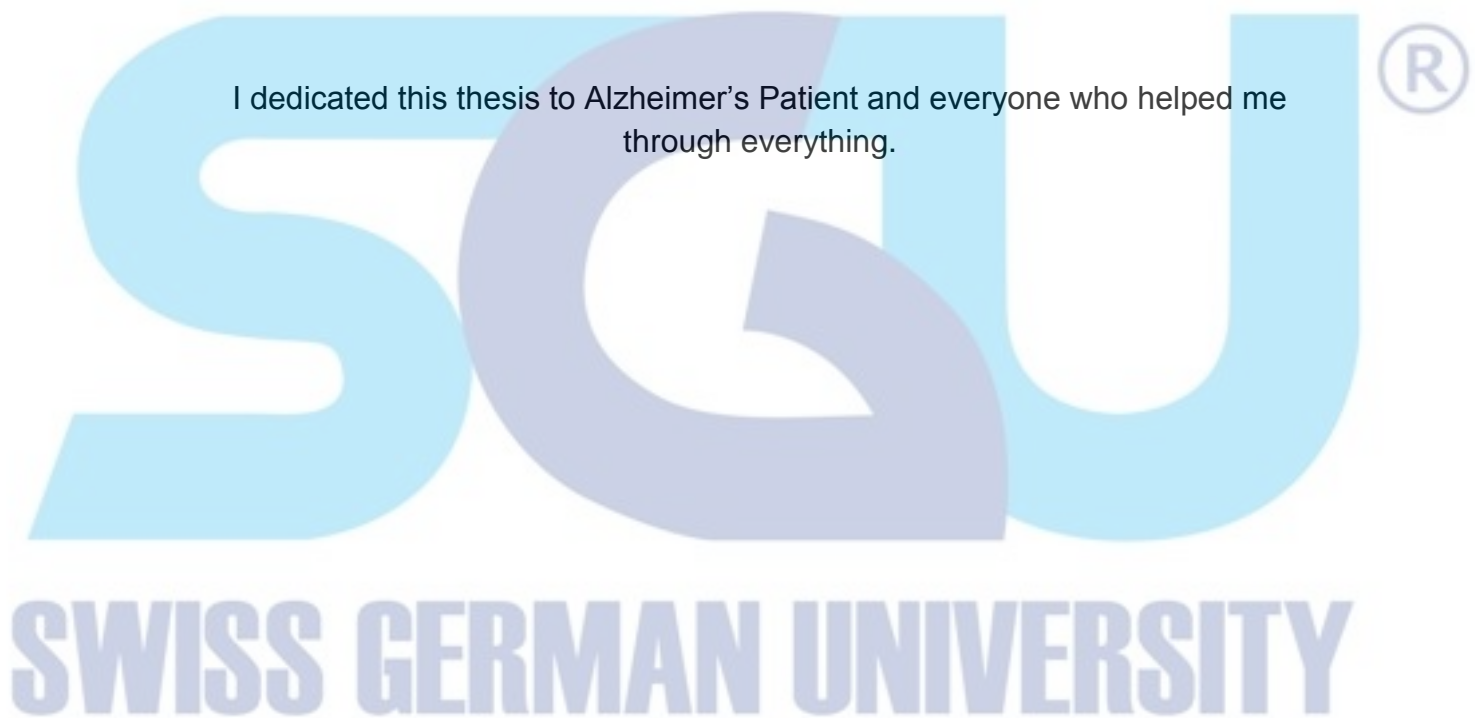
.Keyword : butterfly pea root, acetylcholinesterase enzyme



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DEDICATION

I dedicated this thesis to Alzheimer's Patient and everyone who helped me through everything.



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