

Student	Mr. Dechen Dorji
Student ID	6305774
Degree	Bachelor of Science
Program	Biomedical Sciences
Research Advisor	Dr. Watchara Chongsa
Research Co-advisor	Assist. Professor. Pataweekorn Ketkomol Dr. Suparit Pakdeethai
Title	Phytochemical screening and evaluation of antioxidant and antibacterial effect of <i>Smilax ovalifolia</i> root extract
Key words	<i>S. ovalifolia</i> root, Total phenolic content, Total Flavonoid content, Antioxidant, Antibacterial.

ABSTRACT

Smilax ovalifolia locally known as Hau-Ai Lek is a herbal plant that belongs to the family *Smilacaceae*. It is found in Asian countries including Thailand where they are traditionally used by many tribes and people as medicine for diseases and disorders. As per WHO non communicable disease and communicable disease contributes to highest mortality in the world today. This plant was found to contain lots of phytoconstituent that can facilitate in antioxidant activity, antimicrobial and anti-inflammatory activities especially in its leaves extract. However, there is no studies done on phytochemical screening and evaluation of antioxidant and antimicrobial effect of *S. ovalifolia* root extract yet. Non communicable diseases are mostly caused by oxidative stress while communicable diseases are caused by pathogenic microorganisms. Therefore, we have done the studies on its root extract and the results showed contents of phenolic and flavonoid compounds by determination of total phenolic and flavonoid content. It has also showed it has antioxidant activities but no antibacterial effects.

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