



**Isolation of an Organic Compound  
from *Leucas cephalotes* Spreng (Pink - Gu - Hteik - Peik)  
and Study on its Bioactivity**

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**Abstract**

In this research work, phytochemical screening of Myanmar Indigenous Medicinal Plants, namely Pink – Gu – Hteik – Peik was determined. The antibacterial activities of the crude extract of this plant were performed in various solvent systems by utilizing agar well diffusion method on six organisms. In addition, isolation of an unknown organic compound could be done from this Myanmar Indigenous Medicinal Plant applying advanced chromatographic methods such as Thin Layer and Column Chromatography. Furthermore, the functional group containing in the isolated compound could be assigned by FT-IR spectroscopic method.

**Key words:** Phytochemical screening, Pink – Gu – Hteik – Peik , antibacterial activities , agar well diffusion method, chromatographic methods , FT-IR spectroscopic method, traditional medicine

**Introduction**

The human race, over the centuries, has developed a wide variety of technologies with due regard to nature and the ecosystem. Exploration of medicinal properties of plants, extracts of animal and marine life had created, through careful observation, trial and error, a vast heritage of knowledge and expertise in different cultures and civilizations. Most of such indigenous knowledge was handed down, through the ages, by oral tradition. In particular, in Asia, well-established systems of medicine were in vogue even before modern medicine made its debut.

Modern science is founded on the belief that knowledge, as it progresses, accumulated new and improved concepts driving out the old and the fallible. It prides itself on being objective and rigorous; yet it fails to recognize that there can be other systems of thought. Phytotherapy, or herbal medicine, believes in the harmonious view that “the whole plant is greater than the sum of its parts”. Some of the wonder drugs of modern medicine have their roots in indigenous medicine. Millions of people in the third world will always use herbal medicines because they believe in them. Most of Myanmar people have also been relied on herbal medicines and medicinal plants for their health care. In such manner that, there is a need to preserve the enormous trove of wisdom and traditional knowledge by supporting scientific chemical analysis. Therefore it is a scientific research needed to conduct on Myanmar Traditional Medicinal Plants with deep interest.

In this research work, Pink–Gu–Hteik–Peik plants were collected from Myingyan Township, Mandalay Division. Firstly, prephytochemical screening and antibacterial activities of crude extract of the plants were carried out. In addition, pure organic compound

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