

**ISOLATION AND PRELIMINARY IDENTIFICATION OF ACTIVE
COMPOUNDS FROM THE STEM OF *LEEA INDICA* (MEMALI)
USING CHROMATOGRAPHIC TECHNIQUE**

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ABSTRACT

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Leea indica is a medicinal plant that has been widely used as traditional remedy in curing many diseases. This study focused on isolation and preliminary identification of active compounds from the three different stem extracts of *L. indica* that have anti-oxidant and anti-microbial properties. The isolated active compounds from dichloromethane (DCM) extract at R_f 0.17 and R_f 0.25 was identified as 9-Octadecane and Aromatic compound after subjected to FTIR, NMR and GC-MS. In DPPH radical scavenging activity analysis, all of the three extracts exhibit anti-oxidant properties where only methanol (MeOH) extract is the most anti-oxidative. The IC_{50} of MeOH extract is 1.14 $\mu\text{g/ml}$, which exceed the IC_{50} of Ascorbic acid (standard) which only 1.12 $\mu\text{g/ml}$. The stem extracts of this plant exhibit both anti-oxidant and anti-microbial properties. MeOH stem extract showed the strongest anti-oxidant activity due to presence of phenolic compound in the extract which known as strong radical scavengers. The stem of *L. indica* was proved containing active compounds that have anti-oxidant and anti-microbial properties.

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