

**EXTRACTION OF VOLATILE OIL FROM *CYMBOPOGON
CITRATUS***

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ABSTRACT
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Cymbopogon citratus commonly known as lemongrass which widely used over many years for several purposes such as in medicine, cooking fragrance, aromatherapy and many more. This study aimed to evaluate the extraction of essential oil from fresh rhizome and leaves of *C. citratus* and its chemical composition with the different solvent used (hexane and dichloromethane). The essential oil was obtained by hydrodistillation process followed by solvent extraction and rotary evaporator. The bioactive compounds of *C. citratus* have been tentatively analyzed with the aid of gas chromatography-mass spectrometry (GC-MS). Different part of lemongrass used gives the different amount of essential content. Rhizome part of *C. citratus* showed the significant effect in its essential oil content and revealed the higher presence of chemical compound compared to leaves. Analysis of oil revealed the presence of ten compounds in leaves and fourteen compounds in rhizome respectively with different solvent Dichloromethane showed the marked effect on the proportion of the various components compared to hexane. α -citral was found to be the major compound in leaves part with the percent of similarity index (76.2% and 75.3%), whereas *C. citratus* rhizome obtained epoxy-linalooloxide as its major compound (81.1% and 82.6%) even the different solvent used in its extraction (dichloromethane and hexane).

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