

## ABSTRAK

Gambelu (*Alpinia malaccensis (Burm, f)*) merupakan salah satu tumbuhan obat penghasil minyak atsiri. Di Minangkabau secara tradisional digunakan untuk “batangeh” (aromaterapi). Penelitian ini dilakukan untuk mengetahui rendemen dan kandungan kimia minyak atsiri pada masing-masing bagian tumbuhan gambelu. Isolasi minyak atsiri dilakukan dengan proses distilasi uap-air dan dilakukan analisis kandungan kimia dengan menggunakan GC-MS ( *Gas Chromatography - Mass Spectometry* ). Hasil penelitian menunjukkan kandungan minyak atsiri tertinggi terdapat pada bagian rimpang (6,22%), diikuti bagian daun (4,86%), sedangkan bagian batang hanya mengandung (1,42%). Komposisi utama rimpang, batang, dan daun gambelu yaitu metil sinamat dengan kandungan tertinggi terdapat pada bagian daun ( 69,75 ), diikuti bagian batang ( 64,12% ), dan rimpang ( 44,86% ). Terdapat perbedaan rendemen yang signifikan antara rimpang, batang dan daun gambelu, dengan  $p<0,05$ .



## **ABSTRACT**

Gambelu (*Alpinia malaccensis* (Burm, f)) is one of the medicinal plants which produce essential oil. In Minangkabau, it is traditionally well known as "batangeh" (aromatherapy). This study was conducted to determine the yield and the chemical constituents of essential oil on each part of gambelu's plant. The isolation of essential oil is made by water-steam of distillation process and analyzation of chemical constituents by using GC-MS (Gas Chromatography - Mass spectrometry). The results showed that the highest essential oil content were found in the rhizome (6.22%), then followed by the leave (4.86%), while the stem was only contains (1.42%). The main composition of rhizomes, stems, and leaves gambelu is methyl cinnamic with the highest content are found in the leave (69.75%), followed by the stem (64.12%), and rhizomes (44.86%). There is a significant difference between the rhizome, stem and gambelu leaves, with  $p < 0.05$ .

