

**ABSTRACT:**

The essential oils obtained by hydrodistillation of the rhizomes of *Alpinia aquatica* Rosc. syn. *Alpinia melanocarpa* and *Alpinia malaccensis* Roscoe were analysed by capillary gas chromatography and gas chromatography-mass spectrometry. Eighteen compounds, representing 98.4% of the essential oil were identified in *A. aquatica* rhizome oil, with  $\beta$ -sesquiphellandrene in 36.5% being the major constituent, while 20 compounds representing 99.7% of the rhizome oil of *A. malaccensis* were identified, among which methyl (E)-cinnamate (78.2%) was the major constituent.