# A STUDY OF THE ESSENTIAL OIL OF TURMERIC (CURCUMA LONGA L.) BY COMBINED GC-MS ANALYSIS

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The essential oil of turmeric has been previously studied by gas chromatography on packed columns[1] and only 10 compounds have been identified. The present study of turmeric oil was carried out using capillary GC combined with mass spectrometry. The oil was extracted by steam distillation using apparatus described by Shipton and Whitfield[2] Likens and Nickerson[3] using hexane and isopentane as solvents. The oil was analysed by capillary Gc and GC/MS. The oil was found to contain 32 compounds of which 22 were not previously reported. Sabinene, limonene, $\beta$-Caryophyllene, $\alpha$-terpineol, borneol, eugenol, thymol and $\alpha$-nerolidol are some of the unreported compounds found in the oil.

In our study GC peaks correspounding to ar-turmerone and turmerone, which were previously reported[1] as the major constituents of turmeric oil were found to contain 10 components.

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