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ANALYSIS OF SRI LANKAN ESSENTIAL OILS

BY

GAS CHROMATOGRAPHY AND MASS SPECTROSCOPY.

BY

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**ABSTRACT**

This thesis describes the GC/MS analysis of laboratory distilled essential oils obtained from Cinnamon, nutmeg, mace, turmeric, ginger, pepper, cardamom, clove, citronella, eucalyptus, curry leaf and lemongrass on capillary column. This is the first time that analysis of essential oils from Sri Lankan varieties of *cinnamomum zeylanicum*, *Myristica fragrance*, *Curcuma longa*, *Zingiber officinale*, *Piper nigrum*, *Ellataria cardamum*, *Caryophyllus aromaticus*, *Cymbopogon nardus*, *Eucalyptus globulus*, *Murraya koenigii* and *Cymbopogon citratus* has been done on capillary column. In addition to the previously characterised compounds, several compounds were characterised for the first time from all the essential oils analysed. For the first time GC study of cinnamon fruit oil was carried out.

A study on commercially distilled essential oils was done to detect the presence of adulterants. No adulteration was observed in the commercial oils analysed.

Key words

Essential oils, gas liquid chromatography, mass spectrometry, spices, cinnamon fruit.