Nutritional quality of Cavendish banana (*Musa acuminata*, AAA) as affected by basil oil and determination of basil oil residues by GC-MS

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ABSTRACT

The effectiveness of basil oil on the nutritional properties of Cavendish banana and chemical composition of basil oil and oil residue levels of treated banana fruits were evaluated in this study. Cavendish banana hands were treated with 1% alum (w/v), 1% alum (w/v) + 0.4% *Ocimum basilicum* (basil) oil, distilled water (control) and packaged in Low Density Polyethylene (LDPE) bags and stored at a cold room at 12-14ºC. After two weeks of cold storage banana were induced ripened and nutritional contents of treated Cavendish banana were determined. Gas Chromatography - Mass Spectrometry (GC-MS) was instrumental in identifying the chemical constituents of basil oil as well as residues in basil oil treated Cavendish banana peel after two weeks of storage at 12-14ºC.[1]

Nutritional properties of basil oil treated Cavendish banana showed no adverse changes compared to control. Methyl chavicol (estragole) was the most abundant component (74.44%) of basil oil followed by linalool (15.01%). GC-MS data revealed that negligible amount of residues of basil oil retained in treated Cavendish banana after 14

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