Title Changes in volatiles in the liquid endosperm of aromatic coconut 'NamHom' during fruits

development

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Abstract

The most famous young green aromatic coconuts in Thailand is the 'NamHom' cultivar a mutant of green dwarf type; having sweet and aromatic liquid endosperm. The aromas and volatiles the liquid endosperm ofNamHom and NamWan cultivars were investigated every 2 weeks from 3-8 months after fruit set. Static head space and solid phase micro extraction (SHS-SPME) technique and gas chromatography combined mass spectroscopy (GC-MS) were used to analyze volatile compounds. 2-acetyl-l- pyrroline (2AP) was found as key volatile compounds only in Namhom and not found in other. Both cultivars had same GC spectrum pattern ofhexanol, cyclohexanol, cyclopenta siloxane, isononanol, decanal, dodecanal, and hebtabone during the study periods. 2AP in liquid endosperm was found from 6 months after fruit set. L- Ascorbic acid, glucose, fructose and sucrose and fatty acid contents increased throughout the fruit development.