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EFFECT FERMENTATION ON VOLATILE COMPOUNDS OF PACKAGED CASTOR OIL -MORINGA SEEDS CONDIMENT (*OGIRI*)

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ABSTRACT

The effect of fermentation on volatile compounds of packaged castor-moringa seeds condiment (*ogiri*) was investigated. Blends of castor oil seeds and moringa seeds were used to produce fermented condiment (*Ogiri'*). A 100% castor *ogiri* (MC_{100}) and 100% moringa *ogiri* (MM_{100}) that served as control were packed in *uma l*eaves and fermented for 48 h. Castor and moringa *ogiri* were blended in ratio 86. 21:13.29, fermented in different fermentation times (46.81 h, 51.99 h, 51.64h and 47.52 h) and packaged in *Uma* leaves, aluminum foil, aluminum foil and plastic containers designated as MMC, FMC, FMC_{64} and Plastic container. The volatile compound of packaged fermented castor- moringa seeds (*ogiri)* were evaluated using Gas –Chromatography / Mass Spectrometry (GC-MS). The result of amino acids showed that only eighteen amino- acids were detected. A total of 162 volatile compounds were identified in packaged castor – moringa *ogiri*. The compound identified were various types of acids, ester, hydrocarbons, aromatic compounds, alcohol, ketones, aldehydes, sterols, among others. The predominant volatile compound found in packaged fermented castor- moringa seeds *were* acids followed by esters. Samples FMC_{64} (86.21: 13. 29 fermented for 51. 64 h) had higher concentration in hydrocarbon (11.52%), ketones (2.40 %), sterols (15.31%) and vitamins (7.48 %.) than other samples..