

**VOLATILE COMPONENTS OF THE NIGERIA SOUR
'ACHA-GUGURU'- A FERMENTED AND ROASTED
ACHA (DIGITARIA EXILIS STAPF) GRAIN**

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ABSTRACT

The volatile compounds of a Nigerian toasted sour 'acha-guguru' snack prepared with *Lactobacillus planetarium* were identified on a GC-MS. A total of 17 volatile compounds were identified including 3 aldehydes, 6 heterocyclic compounds, 3 alcohols, an ester, 2 furans, a ketone and 1 hydrocarbon. Major volatiles included pentanol, ethylacetate, benzylalcohol, 2-ethylpyrazine, 2,3,5-trimethylpyrazine, furfural and benzaldehyde. The GC-sniffing results indicated that the compounds of sour acha-guguru snack included ethylacetate, 5-methyl-1-AZA-6-oxabicyclo (3-1-0) hexane, 3-methylbutanol, 2-ethylpyrazine, benzaldehyde, 2,3-methylbutanol, 2-ethylpyrazine, benzaldehyde, 2,3-methylpyrazine, nonanal, 2,3,5-trimethylpyrazine and 2-acetylpyrroline.

Keywords: sour 'acha-guguru', volatiles, GC-sniffing.