



## QUALITY ASSESSMENT OF *AFRAMOMUM DANIELLI* SPICED FRUIT LEATHER FROM AFRICAN STAR APPLE FRUIT

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### ABSTRACT

Quality assessment of *Aframomum danielli* spiced fruit leather from African Star Apple was investigated. The sugar sweetened fruit leather samples were spiced with 0.2g to 1.0g *A. danielli* powdered extract, while the control had no *A. danielli*. The quality of the processed fruit leather was assessed over a 12-week storage period, with changes noticed in the colour of the control sample. Losses in ascorbic acid,  $\beta$ -carotene and lycopene followed similar trend. The percentage loss in ascorbic acid for the control and the treated samples were 23.78% and 8.18% respectively. For lycopene, the control lost 44.7%, while the treated samples, 39.2% maximum, over same storage period. Sample F had the highest mean score for  $\beta$ -carotene (0.117mg/100g) after 12 weeks, while the control had the least, 0.046mg/100g. Titratable acidity of the samples increased with storage, as the pH values decreased. Acidity reduced the loss rate of ascorbic acid,  $\beta$ -carotene and lycopene contents. Microbial load of the samples reduced with increasing quantity of the spice. Sample spiced with 1.0g *A. danielli* had no growth during the storage period, and retained nutrients better. The control sample had a better rating in all the parameters measured alongside the sample spiced with 0.2g of the spice.

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