



Original Article

Bacteriological assessment of guava and orange fruits in north east Nigeria

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Abstract

The bacteriological assessment of guava and orange fruits sold in Maiduguri metropolis was determined by isolating and identifying bacteria agents associated with contamination of the fruits. One hundred and fifty (150) fruits samples comprising 75 Guava and 75 Orange fruits were assessed using microscopic and biochemical methods. Of the 150 samples investigated, 130 (87.7%) were contaminated with one or two bacteria pathogens. The general distributions of bacterial contaminants were Staph. Aureus 19 (14.6%), Klebsiella 57 (43.8%), Proteus 8 (6.2%), E. coli 14 (10.8%) and mixed growth 32 (24.6%). The highest bacterial contamination was observed in Orange fruit (54.6%) and also among the market and road-side marketers with 44 (33.8%) contamination rates respectively. The contamination could probably be due to poor quality of water used by sellers and buyers in washing the fruits. This therefore calls for health education of the vendors and implementation of standard hygienic practices which may reduce contamination of fruits both at the market places and streets.

Keywords: Guava, Orange fruits, Staph. Aureus, Klebsiella, Proteus.

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