Abstract

Vegetables are edible part of plants. A total of twenty five raw salad vegetables were collected and the microbiological assessment was made using pour plate method. The analysis was carried out on carrots, cucumber, cabbage, lettuce and tomatoes. The results obtained from this study revealed that the total heterotrophic viable bacterial counts, coliform counts and fungal counts for all the salad vegetables ranged from 1.4 × 106 - 6.2 × 106 cfu/g, 1.1 × 106 - 3.3 × 106 cfu/g and 2.1 × 103 - 4.5 × 105 cfu/g respectively. The data were subjected to One Way Analysis of Variance (ANOVA) test which showed that there was significant difference (p <0.05) in the microbial load of each of the raw salad vegetables samples. The microbial isolates identified were E. coli, Staphylococcus aureus, Bacillus subtilis, Klebsiella sp., Pseudomonas sp., Aspergillus niger, Mucor sp., Penicillium sp., Aspergillus flavus and Fusarium sp. Staphylococcus aureus and Aspergillus niger were predominant. This suggests that salad vegetables used in this study are of public health concern because, they harbours microorganisms that could be hazardous to human health. Hence consumers should practice appropriate hygiene during the preparation of salad for consumption.