MICROBIAL QUALITY OF ORGANIC PRODUCE – A REVIEW

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Abstract - The demand for healthy foods by consumers as well as the growing drive towards sustainable environment has resulted in substantial increase in the production of organic crops and especially fruits and vegetables. This is strongly associated with the diverse of beneficial nutritional compounds present in these produce as well as the easy mode of consumption of most of them. Most of these crops, especially fruits and vegetables are consumed with minimum to no heat preparation which may lead to serious infection and outbreak if bacterial or pathogenic contaminated ones are consumed. There have been reports of microbial and pathogenic contaminations in some agricultural crops which are linked with the handing of the produce after harvest. There are however limited studies into the contamination through the method of cultivation such as the use of organic manures in organic production. Organic manure is believed to be a fertile breeding medium for bacteria and microorganisms as a result of its natural state and materials. This study was therefore formulated to review the previous studies on microbial quality of organic produce in other to establish the significance of organic manures on the microbial contamination of organically cultivated fruit and vegetables. Although the findings revealed some pathogenically contaminated crops as a result of post-harvest handling, there was however no statistical significance of microbial contamination of organically produced crops as a result of the use of organic manure.

Keywords - Production of Organic Crops, Fruits and Vegetables, Organic Manure, Bacteria and Microorganisms