Nutritional Quality Assessment and Safety Evaluation of Food Crops

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Abstract : In sustained and consistent efforts to improve food security, numerous and different methods are proposed and used in the production of food crops, and farm produce to meet the demands of consumers. However, unregulated and indiscriminate methods of production present another problem that may expose consumers of these food crops to potential health risks. Therefore, it is imperative that a thorough assessment of farm produce is carried out due to the growing trend of health-conscious consumers preference for minimally processed or raw farm produce. This study evaluated the safety and nutritional quality of food crops. The objectives were to compare the nutritional quality of organic and inorganic farm produce in one hand and, on the other, evaluate the safety of farm produce with respect to trace metal and pathogenic contamination. We conducted a broad systematic search of peer-reviewed published literatures from databases and search engines such as science direct, web-of-science, Google scholar, and Scopus. This study concluded that there is no conclusive evidence to support the notion of nutritional superiority of organic food crops over their inorganic counterparts and there are documented reports of pathogenic and metal contaminations of food crops.

Keywords : food crops, fruits and vegetables, pathogens, nutrition, trace metals
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