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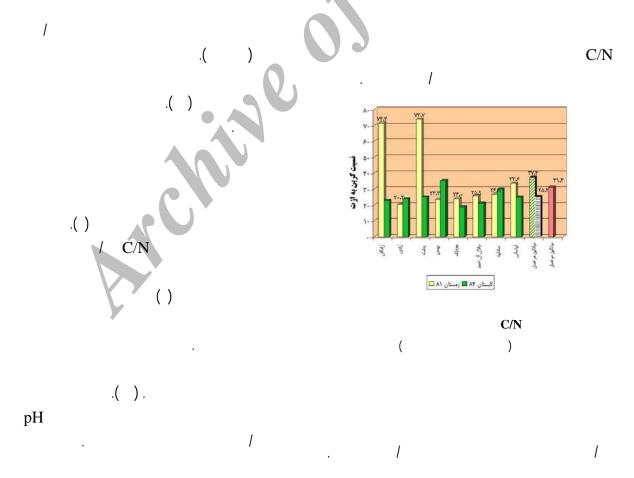
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Study of quantity and quality of the waste produced in Tehran fruit & vegetable wholesale markets

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Abstract

Fruit and vegetable markets in Tehran are managed under the supervision of Fruits, Vegetable and Agricultural Products Wholesale Markets Organization. There are eight wholesale markets, including 327 stands in Tehran. In order to examine the waste produced in wholesale fruit an vegetable markets in winter 2002 and summer 2003 qualitatively and quantitatively, sampling was carried out as minimum and maximum and in a random mode. The average percentage of the components of the waste materials and their specific gravity and chemical composition were determined as follows: fruit & vegetables 84.35%, glass 0.19%, wood 3.85%, paper, card board and carton 3.59% PET and plastics 3.03%, metals 0.19%, bone and protein materials 1.50%, dry bread 0.40%, fabrics 0.50% and miscellaneous materials 2.35%. Average specific gravity of the waste is 283.3 (kg/m³). Results of the chemical analysis of the waste produced in wholesale fruit and vegetable markets were as follows: moisture 80.94%, salinity 9.33%, acidity (pH) 5.52%, SP 88.75%, OM 65.88%, ash 29.19%, N 1.38%, P 0.24%, K 1.43%, Na 0.47%, O.C 36.32% and C/N Ratio 31.30. Results indicate fruit & vegetable markets waste are suitable for production of high quality compost in Tehran city.

Key words: waste, fruit and vegetable, quantity and quality, Tehran, compost