Effect of municipal solid waste compost on the yield and some qualitative indices of pumpkin (Cucurbita moschata Duch. ex Poir.)

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Application of Municipal Solid Waste Compost (MSW) to soils could help to solve municipalities’ problems. The aim of this study was to determine the suitability of MSW compost as a source of organic matter in a soil for field vegetable production. The Experiment was conducted at the research field of Guilan University in 2006. The suitability of MSW compost at various application rates was tested on pumpkin (local variety) plots. Treatments were 0, 100, 150 and 200 t ha⁻¹ compost as mulch. Result showed that, when compost increase to 150 t ha⁻¹, plant length, leaf, shoot and flower number, fresh and dry weight, total soluble solid, vitamin C content, chlorophyll a, b and total chlorophyll content of leaf increase significantly. However, No significant difference has been found between 150 and 200 t ha⁻¹ at this indices. When compost application increase to 200 t ha⁻¹ titrable acidity showed significant decrease. However, Zn and Cu content positively responded to compost increasing but this not significantly.

Keywords: Municipal solid waste compost, Cucurbita moschata Duch. ex Poir, Yield, Heavy metals

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