



## **Managing soil nutrients with compost in organic farms of East Georgia**

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Soil Fertility management in organic farming relies on a long-term integrated approach rather than the more short-term very targeted solutions common in conventional agriculture. Increasing soil organic matter content through the addition of organic amendments has proven to be a valuable practice for maintaining or restoring soil quality.

Organic agriculture relies greatly on building soil organic matter with compost typically replacing inorganic fertilizers and animal manure as the fertility source of choice.

In Georgia, more and more attention is paid to the development of organic farming, occupying less than 1% of total agricultural land of the country. Due to increased interest towards organic production the question about soil amendments is arising with special focus on organic fertilizers as basic nutrient supply sources under organic management practice.

In the frame of current research two different types of compost was prepared and their nutritional value was studied. The one was prepared from organic fraction municipal solid waste and another one using fruit processing residues. In addition to main nutritional properties both composts were tested on heavy metals content, as one of the main quality parameter.

The results have shown that concentration of main nutrient is higher in municipal solid waste compost, but it contains also more heavy metals, which is not allowed in organic farming system. Fruit processing residue compost also has lower pH value and is lower in total salt content being is more acceptable for soil in lowlands of East Georgia, mainly characterised by alkaline reaction.