



## **Mineral composition of organically grown tomato**

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In recent years, consumer concerns on environmental and health issues related to food products have increased and, as a result, the demand for organically grown production has grown. Results indicate that consumers concerned about healthy diet and environmental degradation are the most likely to buy organic food, and are willing to pay a high premium.

Therefore, it is important to ensure the quality of the produce, especially for highly consumed products.

The tomato (*Lycopersicon esculentum*) is one of the most widely consumed fresh vegetables in the world. It is also widely used by the food industries as a raw material for the production of derived products such as purees or ketchup. Consequently, many investigations have addressed the impact of plant nutrition on the quality of tomato fruit.

The concentrations of minerals (P, Na, K, Ca and Mg) and trace elements (Cu, Zn and Mn) were determined in tomatoes grown organically in East Georgia, Marneuli District. The contents of minerals and Mn seem to be in the range as shown in literature. Cu and Zn were found in considerably high amounts in comparison to maximum permissible values established in Georgia. Some correlations were observed between the minerals and trace elements studied. K and Mg were strongly correlated with Cu and Zn. Statistically significant difference have shown also P, K and Mg based between period of sampling.