Title	Effect of organic growing systems on sensory quality and chemical composition of tomatoes
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Abstract

Tomato plants were grown in the greenhouse in the soil, in confined beds, or in combined beds where the roots could also develop in the soil outside the bed. The beds were filled with compost based on clover grass hay, deep litter and peat and harvested in early summer and autumn in 2002 and 2003, and in the soil treatment the same compost was incorporated into the soil. The tomato fruit quality was assessed by sensory analysis and content of chemical components as, e.g. dry matter, soluble solids, citric acids and volatile components. The content of minerals was mainly determined to evaluate possible limitations in nutrient supply. Due to only minor effects of growing systems on sensory quality and chemical composition of tomato fruits it is concluded that it is possible to produce tomato fruits in confined and combined soil bed systems without any loss in eating quality. Actually the results indicate that a slight increase in quality of tomatoes from the confined and combined systems is obtained. The present result points to the fact that confined and combined growing systems may be new relevant commercial growing systems, in which the quality of tomatoes seems to be ensured, and in which nutrient loss and root diseases contamination can be reduced.