

**Title** On-line measurement of humidity in the agri-food chain  
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### **Abstract**

The aim of the present study was to evaluate a sensor system for application in the agri-food chain. Quality maintenance of perishable horticultural produce can be improved by analysing and monitoring environmental conditions of postharvest processes. The basic idea is to record and control humidity and temperature in agri-food chain to get more detailed information about evapotranspiration behaviour of fruits and vegetables. During storage and transportation the environmental conditions will be monitored on-line by miniaturized sensor systems. Results of testing the sensors are demonstrated. The behaviour and properties of sensors are characterised under different environmental conditions. Due to representing study, sensor systems might be used for improving quality management of agricultural food in the supply chain.