

Title The influence of term of cultivation substrates and cultivars on sensory value of fruit cucumber (*Cucumis sativus* L.) in greenhouse production.

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Abstract

The experiments were conducted in the greenhouses of Department of Vegetable and Medicinal Plant Warsaw University of Life Sciences. Two cultivars of greenhouse cucumber Pacto F1 and Melen F1 were used in this experiments. The plant were grown on three different substrates (rock wool, perlite, wood fibre) in the three times of cultivations: spring time (set 29.01.2007), summer time (set 16.05.2007) and autumn time (set 28.08.2007). In each cycle of cultivation the fruits of cucumber were analyzed by sensory analysis. The quality evaluation was made by the scaling method. The trained panel of 10 persons evaluated cucumber fruit samples. Each panelist marked the subjective evaluation of the investigated sample on a scale - a segment of a straight line with border marks. The marked evaluations were converted to numerical values in the stipulated units from 0 to 10. Cucumber fruit quality attributes such as: diameter of the core, flesh firmness, colour of fruit, juiciness, fresh smell of cucumber, off-odour, fresh taste of cucumber, sweet taste, bitter taste, off-taste were evaluated by quantitative descriptive analysis (QDA). The results showed that the highest differences of attribute such as: texture, smell and taste were noted for terms of cultivation. There were not significantly differences in sensory analysis of fruit cucumber regardless of used substrates. The fruit of Pacto F1 and Melen F1 cultivars were differentiated in consideration of attributes of texture (color of fruit and diameter of core).