

Title Influence of mechanical harvest on the physical properties of processing tomato
(*Lycopersicon esculentum* Mill.)

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Abstract

Data on physical properties of agro-food materials are valuable because they are needed as input to models predicting the quality and product behaviour. The correlation between laboratory test variables and the quality of tomato harvesting will contribute to develop an optimal solution for mechanisation. Firmness and skin resistance are the most relevant properties in quality characterisation of the tomatoes processed in the canning industry. Most of mechanical actions affecting tomatoes are produced during harvest and transport causing a falling-off in tomato quality. In order to determine the influence of mechanical harvest, tomato varieties were mechanical harvested and evaluated in laboratory. Impact test showed loss firmness in tomato from the bottom of the trailer up to 30%. The loss of tomato skin resistance to crack was about 6%.