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Res. Agr. Eng.

**Blahovec J., Yurov A.:
The influence of
conductivity
measurement on**

mechanical properties of potato tubers – Short communication

Res. Agr. Eng., 56 (2010): 41-46

Deformation curves in uniaxial compression of raw potato tuber were analyzed at Nicola and Saturna varieties. In the first part of deformation (time 1 min), some part of specimens were loaded by electric field simulating simultaneous measurement of the specimen alternating-current conductivity (three levels of voltage 1, 5, and 10 V and three frequencies 1, 10, and 100 kHz). The obtained curves were analyzed by six parameters. In five of them no differences were approved statistically ($\alpha = 0.05$). Only in the case of modulus of elasticity some differences were observed; however, the differences cannot be simply explained by the influence of the electric field.

Keywords:

potato; conductivity; deformation curve;
voltage; frequency; deformation

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