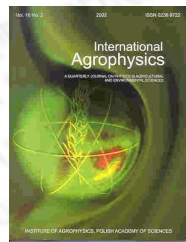




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Role of water content in food and product texture

(get PDF )

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abstract Water is very important component forming practically all important properties of the agricultural products, the foods and the biological objects. Among the properties, the important role is played by mechanical properties including the visco-elastic ones. These properties are influenced mainly by temperature and the strain rate but water plays the role of the main plasticizer in the controlling mechanisms. The relative simple models were developed for deformation of the soft homogeneous substances and character of the theories is discussed in this paper. Moreover, the role of water in the real agricultural products is structurally and concentration dependent. This role can be well described by sorption properties expressed by the sorption isotherms.

keywords water, texture, plasticizer, sorption, water activity, turgor

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