

## **PENETROMETRIC METHOD FOR DETERMINING THE HARDNESS OF CROP PRODUCTS.**

***Yu.I. Posudin, doctor of biological sciences, professor***

**National University of Life and Environmental Sciences of Ukraine**

*A penetration method of estimating firmness of the product is based on measuring the force required to push a punch into product and calculating the firmness index through determination of the compression and shear coefficients of the product being tested.*

***Firmness, penetrometer, compression coefficient, shear coefficient.***

An important parameter product is a mechanical hardness - a characteristic that reflects its strength and flexibility, which is measured as the force that causes a deformation.

One of the common methods of determination is penetrometrychnyy (from Eng. Penetrate - penetrate) method, the essence of which is to measure the maximum force that must be applied to mechanical plunger that he got into the product. Practical application of methods penetrometrychnyh accompanied by robust search options hardness.

Penetrometrychnyy evaluation method based products hardness measurement of force that must be applied to the plunger penetrometer to cram it into the product, and calculating the hardness of the material product by determining ratios of compression and shear substances product is characterized by simplicity and speed and can be applied in terms of agricultural production.