

Comparison of Texture Quality Factors of Two Apple Varieties and Evaluating Measurement Accuracy of Magness -Taylor and Fruit Pressure Tester

Maskooki, A.M.^{1*}, Mortazavi, S.A.²

1- Faculty Member of Khorasan Science and Technology Park(Khorasan Research and Technology Development)

2- Professor of Food Science and Technology Department of Ferdowsi University

Texture quality factors of two apple varieties after cold storage duration are evaluated by Magness-Taylor and fruit pressure tester instruments in the same conditions. Force (N) Force/area (F/cm²) and Force/Deformation (F/mm) were determined .All of obtained results were statistically analyzed by Randomized Complete Block Design and means separated by Duncan Multiple Range Test .The results were showed that ,the texture strength and quality of Red delicious apple is better than Golden delicious after cold storage duration. Also the texture quality factors obtained by fruit pressure tester in the same conditions are always more than Magness Taylor and there are high significant differences between the results of two instruments. For prevent of any mistake in evaluating of maturity and texture quality of apples any instruments must be evaluated individually and there is no similarity between the results of them.

Key words: Penetrometer, Magness-Tylore, Texture quality, Apple

*Corresponding author E-mail address: morteza1937@yahoo.com