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**Assessment of the Quality of Green Asparagus (*Asparagus officinalis* L.) Treated by Cassava Starch-Based Coating using Laser Scattering**

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The presented study investigated the effects of cassava starch-based coatings (2%, 3% and 4% of starch w/v) on the weight loss and firmness loss of green asparagus during 4 days of storage at room temperature (26±2 °C, 65-70% RH). According to the results, the coated asparagus exhibited significantly slower deterioration rate than the uncoated control samples. This was confirmed by the decrease in weight loss and firmness loss, compared to the uncoated asparagus (p<0.05). At the end of the storage period, the samples coated with 4% starch formula had the highest level of quality retention, in comparison to the others. Furthermore, the laser scattering technique was also used to evaluate the quality of asparagus during storage. Extracted parameters of laser scattering signal successfully discriminated samples with linear discriminant analysis (LDA), in which the correct recognition rate of the treated groups was 75.26% and the storage time was 70.54%. This study pointed out the effectiveness of laser scattering as a rapid, non-invasive, and practical optical method for assessing the quality of asparagus during storage at room temperature.

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**Phenolic profile, color parameters and antioxidant activity of walnut kernel extracts as influenced by different time and temperature during extraction**

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The aim of the present study was to find the best extraction parameters to obtain the highest amounts of polyphenols and antioxidants from the walnut. The walnut kernels from 'Alsószentiváni 117' cultivar were used for extraction. The extraction methods have been explained in the following table: -Extraction solvent- 100% Methanol; Sample: Solvent- 1:5(w/v); Treatment- Shaking water bath (1) 50°C, 30 Minutes shaking, (2) 50°C, 30 Minutes shaking; then 5°C, 20 Hours, (3) 40°C, 2 Hours shaking, (4) 40°C, 2 Hours shaking; then 5°C, 20 H. To identify the most efficient method we measured: Total Polyphenols Content (TPC), Antioxidant Activity (FRAP), Free radical scavenging activity (DPPH), Color and Flavonoids with HPLC. SPSS-ANOVA was used to analyze the data. According to our results Method (1) showed the highest TPC (25.65 mg/5mL), FRAP (34.43 mg/5mL) and DPPH (55.32%). Highest HPLC peaks for bioactive compounds like Catechin, Rutin, Juglone etc. were also seen in Method (1). These results were further validated by lower L\* value (25.98) of Method (1) compared to others. Also, the ΔE\* for this method was higher (72.6) than others which means that color extract generated by Method (1) was different than others and was full of polyphenols.