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PROPERTIES OF HAZELNUT AS INFLUENCED BY PACKAGING AND STORAGE

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Food quality is a concept that has unquestionable interest to Industries and consumers, hence the concern to preserve the products under appropriate conditions, avoiding physical and chemical changes that jeopardize the integrity of the foods. In this context, evaluation of some physical and chemical properties was done in order to investigate the effects of storage on hazelnuts, under certain conditions of temperature, relative humidity and packaging.

The hazelnut samples used were original from Spain, Portugal and Turkey. The storage of the nuts lasted for a month and a half, and the conditions tested were: at room temperature; at 30 and 50 °C without control over relative humidity of the air; 30 and 50 °C with relative humidity of 90%, refrigeration and freezing. The two types of plastic package tested were low density polyethylene (LDPE) and linear low density polyethylene (LLDPE). The water activity was measured by a hygrometer; moisture by oven drying until constant weight, colour with a colorimeter and texture with a texturometer. The textural attributes measured were hardness and friability.

From the results obtained it was concluded that for a good preservation of the hazelnuts it must be chosen the LDPE type of package and with respect to storage conditions it should be done at room temperature, or alternatively under refrigeration or frozen. High relative humidity conditions jeopardize the quality of the hazelnuts.

Keywords: colour, hazelnut, moisture content, texture, water activity.

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