Stability of cashew nut oil stored under different packaging conditions

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Abstract: During the cashew nut processing there is always about 20-25% of pieces, the so-called splits, which is a final product with a very low commercial value, nevertheless, the oil fraction in these pieces is almost 45%, still with its chemical- and nutritional composition preserved reason why oil extraction could be a way of value-adding to these pieces with a very low commercial value. The objective of the present work was to study the effects of drying treatments of the cashew kernel and different storage conditions of the extracted oil on the composition of the fatty acids. The oil was obtained by the cold pressed method. The pre-treatment of the cashew kernels by drying at a temperature of 50 and 70°C did not affect the physicochemical properties of the oil. Along the storage time of 120 days, the oleic acid content increased, while the linoleic- and linolenic acid content decreased; these changes probably occurred because of the effect of the light, involving oxidation reactions. As a general conclusion, it can be stated that considering the International Food Safety Regulations, the oil of cashew nut obtained under the conditions of this research presented essential fatty acid composition within the established ranges, being also in harmony with the other commercial oil.

Key words: extraction, chromatography, fatty acids, storage