

Research on the Purification of Camelina Oil Used in the Composition of Cosmetic Products

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Abstract

It is known the composition of camelina oil in fatty acids, mainly unsaturated fatty acids, in special linolenic acid, it can have many uses in the pharmaceutical industry, but also in the cosmetic industry. Camelina oil is obtained from Camelina seeds (*Camelina sativa*) through a cold pressing process. The quality of the oil, but also its use depends on the filtration and purification processes. The purpose of this project was to track and analyze the physico-chemical parameters of some oil samples obtained by pressing the seeds grown in the ecological system, kept under different temperature conditions. The evidence of understanding was obtained from the seeds of Camelina, the Mădălina variety, cultivates the Belciugatele farm, working point Moara Domnească (Gâneasa village, Ilfov county) during 2017-2018. The samples kept maintaining the ambient temperature, in dark blue plastic (capacity 10l) filled with 5l oil, in parallel, there are experiments of keeping the refrigerator in the brown glass container, completely filled. After storage, impurity absorption treatments are applied with the addition of bentonite, zeolite, volcanic tuff, in small proportions. The physico-chemical parameters followed immediately after the sprinkling and purification, as well as after keeping under each temperature and encouraging conditions: appearance, color, odor, as well as the determination of the saponification, iodine, but also fatty acid composition. The results of the analyzes carry out and authorize the stabilization of the technological purification flow in the laboratory and the stabilization of the storage conditions of a purified oil, until they can be added in the cosmetic products.