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UNIQUENESS OF HEMP AND LINSEED OILS

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It has long been customary all over the world that vegetables will be more useful if consumed raw, and, moreover, seasoned with high-quality vegetable oils. These include oil from hemp and flax. So hemp oil has a unique composition. The main components are fatty polyunsaturated acids Omega-3 and Omega-6.

Flaxseed oil is also enriched with omega-3 fatty acids, which are destroyed when food is fried. In this regard, such oils are best used as a salad dressing. Flaxseed oil also neutralizes nitrites, which are often found in vegetable products, so you can add it to store-bought vegetables.

Vegetable oils are considered a storehouse of useful fatty acids, because they are an energy resource for the human body.

In Latvia, hemp and linseed have always been used in food and medicine. Hemp and oil flax are used in food because of their specific properties. Flax and hemp oil is the best natural source of vitamin F, because it contains both linoleic acid and linolenic acid, which the body cannot create for its own needs from other fatty acids. Oxidation of fats and oils reduces the nutritional value of food and causes various health problems [1].

Hemp seed oil is dark green in color and has a mild seed flavor and aroma. Properly prepared flaxseed oil is slightly lemon-yellow in color. They can be used both as an oil for food enrichment and as a cooking oil for salads.

Hemp (*Cannabis sativa* L.) is an annual dioecious (monoecious and dioecious) crop of the hemp family (*Cannbinaceae*). Common or seed flax (*Linum usitatissimum* L.) is an annual plant. It belongs to the *Linum* genus of the *Linaceae* family. The area of linseed in Latvia is not large, however, taking into account the development trends of the industry in the world, this crop can be considered a promising crop in the future, because it is easier to grow and its yield does not depend as much on agro-climatic conditions as fiber flax.

The oil content of the seeds exceeds 38% (Tab 1).

Table 1. **The average oil content of hemp and linseed seeds in Latvia**

Species	Variety	Oil content in seeds, %	Oil yield, t ha ⁻¹
Linseed	‘Scorpion’	38,9	0,82
	‘Flanders’	45,1	0,94
Hemp	‘Pūriņi’	41,2	1,23
	‘Bialobrzeskie’	38,5	0,98

A byproduct of the oil industry - linseed meal, or split - is used in fodder, which is a valuable feed for animals, as well as a fertilizer. Linseed oil with its high levels of polyunsaturated fatty acids, especially α -linolenic acid, is very prone to oxidation [1].

Vegetable oils contain a lot of fatty acids, which are necessary nutrients for normal human functions. Vegetable oils are also suitable for diesel engines [2].

Hemp is one of the rare crops that can be used and processed completely, leaving nothing in the field. Seeds – for confectionery, oils, cosmetics and food additives. Hemp fiber – for laminate, paper, construction boards, geotextile, carpets, fabrics. Hemp wood – for bedding, thermal insulation, plastic, plaster boards and lime concrete. Whole plant - for alcohol, fuel and silage.

References

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ВИРОЩУВАННЯ ГАРБУЗА МУСКАТНОГО В УКРАЇНІ

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Найважливішим завданням агропромислового комплексу України є забезпечення населення повноцінними та якісними продуктами харчування. Значне місце у реалізації цього завдання належить галузі баштанництва. Одним з найбільш урожайних і рентабельних баштанних культур є гарбуз [1, 2].

Значна частина території України вважається сприятливою для ведення промислового баштанництва. Але наукове обґрунтування визначення можливих площ посівів баштанних культур в Україні є важливим для визначення найбільш