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MEDICINAL PROPERTIES OF AMARANTH OIL IN THE FOOD INDUSTRY

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Abstract: *The article provides information about the composition of the medicinal plant amaranth, its medicinal properties, as well as the production of various food additives based on amaranth.*

Key words: *amaranth plant, amaranth oil, nutritional supplement, composition of amaranth oil, application, medicinal properties.*

Introduction

Amaranth is native to South America and has been used by locals as a cultivated plant for 8,000 years.

Amaranth later spread to North America, India, and Asia, reaching China. It is now widely used as a cereal and vegetable crop in the mountainous regions of India, Pakistan, Nepal and China. Introduced in European countries, such as Russia and Ukraine, the plant is widely used in medicine, cooking, cosmetology, industry, agriculture and other sectors of the economy. In some countries it is also grown as an ornamental plant for its colorful inflorescences and leaves. It has 65 varieties and more than 900 species.

Amaranth oil is used in medicine in the biosynthesis of cholesterol; in cleansing the body of radionuclides, salts of heavy metals; infectious diseases, herpes, psoriasis, neurodermatitis, eczema, atopic dermatitis, gastrointestinal ulcers, diabetes, liver disease, urinary tract infections, atherosclerosis, anemia, beriberi, angina pectoris, hypertension, oncological and cardiovascular diseases, widely used in solving problems. Dramatically improves immunity, is an unprecedented means of combating anemia.

Amaranth seeds serve as a source of oil and squalene. Although the squalene required for the pharmaceutical industry is obtained from the liver of sharks and whales, the high content of these substances in amaranth oil (8%) and the presence of phytosterols and other substances with medicinal properties necessary for human health are known to science. After that, the emphasis on amaranth oil increases dramatically. Amaranth oil contains 77% unsaturated fatty acids, 50% of which are linoleic and linolenic acids. Vitamin E in the form of tocopherols in fat has an antioxidant effect, lowering blood cholesterol levels. The oil also retains rutin and vitamin R, and has antimicrobial and fungicidal properties.

Amaranth oil and the seeds themselves are traditionally valuable medicinal components - especially in folk medicine. Amaranth oil contains unsaturated fatty acids, a lot of rutin, carotenoids and some of it should be noted that there is a valuable drug - squalene. Not very saturated fatty acids are undoubtedly useful: they are useful in cardiovascular diseases. The effectiveness of its use in prevention has been proven. They also have evidence that it has an anti-inflammatory effect. Squalene slows down the aging process in the body.

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Currently, amaranth oil is used in the biosynthesis of cholesterol, oncological and cardiovascular problems, ischemic diseases, detoxification of the body from radionuclides, salts of heavy metals, infectious diseases, herpes, psoriasis, vitiligo, neurodermatitis, eczema, atopic dermatitis, ulcers of the gastrointestinal tract, diabetes mellitus, is widely used in diabetes, liver diseases, urinary tract infections, atherosclerosis, anemia, beriberi, angina pectoris, hypertension, etc., and also as a means of dramatically increasing immunity.

Due to its biochemical composition, amaranth is a valuable plant for obtaining high quality feed. Depending on the growth phases in the blue mass of amaranth (relative to the absolute dry mass): crude protein 15.6-16.75%, fats 2.4-2.8%, coarse fibers 16, 0-21.7%, calcium 2.1-2.6%, phosphorus 0.2-0.21%, carotene up to 200 mg / kg. For comparison: in the milking-hardening phase of corn grains, the blue mass retains 7.5-8% of protein, which is 2 times less than the dry weight of amaranth.

The high level of vitamin C and carotene in amaranth is an important factor in maintaining the health of animals and birds. A decoction of amaranth flour is used in the treatment of enuresis and hepatitis. Its body, leaves are so rich in vitamins that they can become the most nutritious food in tea growing.

In a word, amaranth, known for its amazing properties, today has established itself in many countries as a widespread agricultural crop with valuable fodder and nutritional value.

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