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MEDICINAL PROPERTIES AND MEDICAL SIGNIFICANCE OF BLACK SEDANA (NIGELLA SATIVA L.)

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Annotatsiya. Qora sedana (Nigella sativa L.) qadimdan xalq tabobatida keng qo‘llanilgan dorivor o‘simliklardan biridir. Uning urug‘i va yog‘i biologik faol moddalarga, ayniqsa, muhim farmakologik ahamiyatga ega bo‘lgan timokinon, nigellon, alkaloidlar, flavonoidlar va yog‘ kislotalariga boy. Tadqiqot natijalari shuni ko‘rsatadiki, qora kunjut antioksidant, yallig‘lanishga qarshi, mikroblarga qarshi, immunomodulyator, gipoglikemik va gepatoprotektiv xususiyatlarga ega. Maqolada qora sedanani tibbiyot va farmatsevtika sohasida ilmiy asosda qo‘llash istiqbollari yoritilgan.

Kalit so‘zlar: Nigella sativa, timoquinon, fitoterapiya, antioksidant, yallig‘lanishga qarshi, xalq tabobati, farmakologiya.

Abstract. Black cedar (Nigella sativa L.) is one of the medicinal plants widely used in folk medicine since ancient times. Its seeds and oil are rich in biologically active substances, especially thymoquinone, nigellon, alkaloids, flavonoids and fatty acids, which have important pharmacological value. The results of the study show that black sesame has antioxidant, anti-inflammatory, antimicrobial, immunomodulatory, hypoglycemic and hepatoprotective properties. The article sheds light on the prospects of using black sedana in the field of medicine and pharmacy on a scientific basis.

Keywords: Nigella sativa, thymoquinone, phytotherapy, antioxidant, anti-inflammatory, folk medicine, pharmacology.

Аннотация. Черный седан (Nigella sativa L.) – одно из лекарственных растений, широко применяемых в народной медицине с древних времен. Его семена и масло богаты биологически активными веществами, особенно тимохиноном, нигеллоном, алкалоидами, флавоноидами и жирными кислотами, имеющими важное фармакологическое значение. Результаты исследований показывают, что черный кунжут обладает антиоксидантными, противовоспалительными, антимикробными, иммуномодулирующими, гипогликемическими и гепатопротекторными свойствами. В статье описаны перспективы использования кедра черного на научной основе в сфере медицины и фармацевтики.

Ключевые слова: чернушка посевная, тимохинон, фитотерапия, антиоксидант, противовоспалительное средство, народная медицина, фармакология.

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1.INTRODUCTION.

In ancient times, in particular, in Indian medicine and Babylonian beauty traditions, black cedar was included in various elixirs and cosmetics to promote health and preserve youth. Even today, it is valued for its useful properties.

Medicinal plants play an important role in the development of modern pharmacology and clinical medicine. According to the World Health Organization, a large part of the world's population uses herbal medicines for treatment. Among them, the black sedan is of particular importance.

Black sedum (Nigella sativa) is an annual plant belonging to the Ranunculaceae family, widely distributed in the Mediterranean region, South-West Asia and North Africa. Historical sources mention that it was used in ancient Egypt, Greece and Eastern medicine. In particular, Ibn Sina in his Al-Qanun fi't-tibb described black cedar as a general energy booster and a cure for many diseases.

In recent decades, scientific interest in black cedar has increased, and the bioactive substances contained in it have been studied in depth. In particular, thymoquinone is of great importance pharmacologically.

The quality and appearance of sedana also depends on the region in which it is grown. Its outer shell is black, and the core can be light orange to brown in color. Unrefined black sesame is especially useful due to its richness in vitamins and trace elements.

The purpose of this article is to systematically study the medicinal properties of black cedar based on scientific sources and evaluate its place in modern medicine.

2. METHODS (Materials and methods)

This scientific work was carried out by the method of analytical and systematic review. Black sedana seed

Black sedan oil

Extracts (alcoholic and aqueous)

3. RESULTS

3.1. Chemical composition

Black sesame seeds consist of the following main substances:

Thymoquinone is the main bioactive substance

Nigellon

Alkaloids (nigellidin, nigelicin)

Flavonoids

Saponins

Fatty acids (linoleic, oleic acid)

Vitamins (Vitamin E)

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Minerals (Fe, Zn, Ca)

Thymoquinone has been identified as a powerful antioxidant and anti-inflammatory substance.

3.2. Benefits of black sedan

Sedana is used as a treatment for nervous system diseases, internal wounds, worms, painful and abnormal menstrual cycle in women, cancer diseases, respiratory tract diseases, nausea and vomiting, kidney and liver diseases, headache and toothache, colds, eye diseases, heart and stomach diseases. To strengthen the body, consume 1 teaspoon of black celery (daily amount, it is not recommended to increase it) after meals. Celery oil also increases breast milk.

Black seed oil improves hair growth and prevents premature graying of hair.

Useful features:

It has a destructive effect against microbes, viruses and various fungal (fungal) viruses. Lowers blood sugar. Facilitates digestion. It cleanses the body of toxins. Helps heal wounds and regenerate cells. Useful for allergic diseases. Strengthens the immune system. Improves the hormonal system and mood. It is recommended for nervous and skin diseases, asthma and allergies in children.

How to use: In order to prevent diseases, in the morning and in the evening, on an empty stomach, 15-20 minutes before eating, you should eat 1 teaspoon of freshly ground celery. It should be consumed within 6 months.

Medicinal recipes that can be prepared at home from black cedar:

- To prepare medicinal tincture of black sedana seeds, pour a teaspoon of crushed seeds into a small teapot, pour a glass of boiling water over it, close the lid, wait 15 minutes, and then slowly drink it warm.

- In most cases, for the treatment of chronic diseases of the gastrointestinal tract, such as cholecystitis, enterocolitis, enteritis, hepatitis, pancreatitis, it is possible to drink 1 cup (150 ml) of tincture 2-3 times a day. If you follow the recommended dosage and frequency of reception, side effects are not observed. In case of an overdose, the tincture can cause irritation of the mucous membrane of the stomach and intestines, which is observed in the form of pain that appears immediately after taking the drug. In this case, reduce the dose or completely stop drinking the tincture.

- If you have a cold with a runny nose, roast and grind black sesame seeds, add a little vegetable oil and keep in a warm place for 24 hours. Put 3-4 drops in each nostril.

- For chest pain, cough and runny nose, add 1 tablespoon of black cumin seeds to boiling water and cover your head with a blanket.

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- For insomnia, mix 1 teaspoon of ground black seeds with honey or tea and drink before dinner.

For high blood pressure: 1 teaspoon is crushed together with sesame seeds and unroasted sesame, 15-20 minutes before meals, on an empty stomach. Treatment should last 6 months.

Cedar tea: Add 1 teaspoon of freshly ground cedar to a glass of boiling water, then cover and let it steep for 10 minutes. Then it is filtered and drunk. You can drink 2-3 cups a day.

Asthma and cough: Massage the chest with a mixture of sedana oil and olive oil. ¼ of the amount is held under the tongue.

Diarrhea: mix 1 teaspoon of sesame oil with a cup of yogurt. This mixture is consumed 2 times a day for 3 days.

Headache: 1 tablespoon of crushed black sesame, 1 tablespoon of crushed anise, 1 tablespoon of crushed peppercorns (cloves) 1 teaspoon before meals. The mixture is held in the mouth until it is easy to swallow. Do not consume with water! Rheumatism: Sedana oil mixed with a small amount of olive is heated, and the painful area is massaged with this mixture.

For skin diseases: mix 1.5 teaspoons of sesame oil with 1 tablespoon of olive oil. The resulting mixture is applied to the face and left on the skin for 1 hour. Then it is washed off.

Dizziness: It is recommended to drink sedana tea. It is also applied under the face and behind the neck.

For earaches: For earaches and infectious diseases, black seed oil is instilled into the ears.

During labor: To relieve labor pains, it is recommended to heat the sedana and then drink it with honey.

Cancer patients: Cedar oil is applied to the affected area. Drink 1 teaspoon of sesame oil and 1 glass of freshly squeezed carrot juice (swish before drinking) 3 times a day. Drink this drink for 3 months.

To improve memory: Boil peppermint and then mix it with honey and 7 drops of sedana oil. Drink hot whenever you want. Also, reduce tea and coffee consumption.

Anti-laziness: It is recommended to consume 10 drops of sedana oil with a glass of orange juice. A mixture of sedana crushed and mixed with honey helps dissolve kidney and gall bladder stones.

Black seed improves hair growth and prevents premature graying.

Black sesame is characterized by a high calcium content - 100 grams of the product contains almost 1000 mg of calcium, which is close to the daily

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requirement. Also, the zinc in it helps the bones to be strong. Sedana contains many antioxidants, which help to reduce the amount of "bad" cholesterol. Magnesium plays an important role in maintaining normal blood pressure.

Vitamin E contained in the product helps to maintain skin tension and elasticity. Therefore, it is recommended to massage with cedar oil. The beneficial fatty acids in it improve intestinal function. Antioxidants strengthen immunity, and fiber protects the liver and helps remove harmful substances from the body.

It has been found to lower blood glucose levels in type 2 diabetes.

Protects liver cells from toxic damage.

Reduces inflammation in bronchial asthma and allergic rhinitis.

Helps control blood sugar.

Lowers cholesterol levels.

Some studies have shown that it inhibits the proliferation of cancer cells.

Effect on mood and nervous system

The combination of calcium and magnesium has a positive effect on reducing nervousness and stress. Tryptophan and thiamine substances help the body to produce serotonin, the "hormone of happiness".

Benefits for women

Sedana contains important substances such as calcium, iron, B group vitamins, zinc, phosphorus, magnesium and selenium. Therefore, it is recommended to use it especially for women who are new mothers. It is also useful during menopause. The phytoestrogens in the composition partially replace the estrogen hormone in women and help to slow down the premature aging process.

In Eastern medicine, it is noted that black sedana improves hearing and vision, strengthens memory, and even helps prevent graying of hair. In an experiment conducted in Japan, white-haired participants consumed two spoons of black sesame every day for two months, and over time, it was observed that the hair color began to darken.

Benefits for men

Zinc and copper contained in sedana are important for men's health. These trace elements improve blood circulation. Also, vitamins A and E have a beneficial effect on the body.

How much should be consumed?

Eating 2-3 teaspoons of black sesame a day is considered sufficient.

Sedan oil

Sedana oil is widely used not only in cooking, but also in cosmetology. It has moisturizing and antioxidant properties and is effective in skin care. Therefore, it is used in the production of various cosmetics and soaps.

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Who is not recommended?

Pregnant women and people who have had organ transplants (liver, kidneys, heart) are prohibited from consuming black celery and celery oil, when it is consumed, the body's immunity increases, which can lead to alienation of surgically placed foreign organs. People with kidney and bladder problems are advised to eat foods containing celery with caution. Since there are about 560 kcal in 100 grams of the product, those who are on a diet should also keep the norm.

Method of consumption

Adults: 1 teaspoon 2 times a day, morning and evening after meals, with any warm drink. Children: half a teaspoon 2 times a day, after meals, with any warm drink.

One may wonder whether it is necessary to consume sedana itself for treatment or its oil is better. Sedana oil is currently extracted from two types of sedana, Saudi and Ethiopian sedana. Both types of sedans are equally useful.

It is necessary to choose real and pure sedana oil. There are cases where some unscrupulous sellers chase the convenient and dirty profit chain and sell black seed oil with cheap cotton or pistachio oil. Therefore, when buying it, it is necessary to pay attention to the fact that it is obtained from a reliable seller, that it is made in a factory, not artificially, and that it is packed and, most importantly, that it is pressed cold (not heated). Only in this case, it is possible to be sure that sedan oil retains its beneficial properties.

How to store?

Black sedan can be stored in a dark and cool place in an airtight container for up to three months. If you want to preserve its quality for half a year, it is advisable to store it in the refrigerator.

4. DISCUSSION.

Analyzes show that black sedana is a universal medicinal plant with versatile pharmacological properties. Its main bioactive component, thymoquinone, has a wide range of biological effects.

Modern scientific research confirms many features that have been used in folk medicine. In particular, it is considered as a promising tool for diabetes, inflammatory diseases and immune system disorders.

At the same time, large-scale clinical studies are still not enough. Dosing, standardization, and long-term safety issues need to be thoroughly investigated.

CONCLUSION.

Black sedana (Nigella sativa L.) is a medicinal plant rich in biologically active substances, with versatile pharmacological effects. It has antioxidant, anti-

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inflammatory, antimicrobial, hypoglycemic and immunomodulatory properties. It has great prospects as an additional and auxiliary treatment in modern medicine.

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