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KIMYO

**X.N.Abdikunduzov, A.A.Ibragimov, O.M.Nazarov**

Mahalliy uzum navlarining urug'idan olingan moyning kimyoviy tarkibini tadqiq etish .....9

**Z.A.Sulaymonova, B.B.Umarov, M.B.Navro'zova**

Ferrosensaqlovchi kompleks birikmalar sintezi va iq spektroskopik tadqiqoti .....14

**I.R.Askarov, M.M. Anvarova**

Chemical composition and medicinal properties of pumpkin seed and its importance in folk medicine .....20

**R.S.Jo'raev**

Benzol-1,2,4-triil tris(2-((dietilkarbamotioil)tio)atsetat) sintezi .....24

**I.R.Askarov, N.Kh.Abdurakhimova**

Determination of quality and quantity indicators of «Ayritosh» food supplement .....30

**I.O'.Normurodov, A.U.Choriyev, O.O.Xudoyberdiyeva, A.K.Abdushukurov**

2-izopropil-5-metilfenil 2-((dietilkarbamotioyel) tio) asetat sintezi.....34

**I.Askarov, Kh.Isakov, S.Mukhammedov**

Ecological and toxicological properties of the biologically active complex of furfurolidendiurea with zinc acetate .....38

**H.I.Ahunova, A.I.Kulonov, V.A.Shavkat**

Diterpene alkaloid from delphinium oreophilum and antioxidant activity .....41

BIOLOGIYA

**B.A.Niyazmetov, V.Karimov, B.Zaripov**

Thermogenic respiration in mitochondria of some animals.....45

**I.I.Zokirov, Sh.X.Yusupova**

Shimoliy Farg'ona hududi no'xat agrobiotsenozida uchrovchi to'g'riqanotli hasharotlar bioekologiyasi .....50

**V.Mahmudov, A.V.Mahmudov**

Сравнительный анализ малого жизненного цикла многолетних кормовых злаков на адырах Узбекистана.....54

**B.M.Sheraliyev, D.I.Komilova, Y.Q.Qayumova, Sh.A.Xalimov**

Farg'ona vodiysidan barbatula (*teleostei: nemacheilidae*) urug'iga mansub baliq turi qayd etildi .....58

**S.A.Omonova, I.U.Maxammadrasulov**

O'zbekiston vizildoq qo'ng'izlari (*coleoptera, carabidae*)ning taksonomik tahlili .....64

**M.M.Mamajonova, V.Mahmudov**

Farg'ona viloyati hududiga introduksiya qilingan dorivor o'simlik turlarini qish mavsumiga tayyorlash agrotexnikasi.....67

**O.A.Turdiboyev, M.X.Akbarova**

Lamiaceae oilasiga mansub taksonlarning morfologik belgilarining qiyosiy tavsii.....69

**Z.A.Jabbarov, T.Abdraxmanov, M.F.Fakhrutdinova, O.N.Imomov**

Tuproq sog'lomligi ko'rsatkichlari va ularning qo'llanishi.....74

**Г.Н.Шакирова**

Виды минеральных удобрений, применяемых в хлопководстве, и нормы внесения.....81

**M.K.Juliyev, L.A.Gafurova, M.D.Xolmurodova, B.E.Abdikairov**

Ugam-chotqol milliy bog'ining tuproqlari va tuproq eroziyasi bo'yicha tadbirlar: muammolar va saqlash strategiyasi .....84

**M.A.Muqimov**

Dog'li yalangbaliq (*triplophysa strauchii*)ning farg'ona vodiysi sharoitida reproductiv xususiyatlari .....88

**CHEMICAL COMPOSITION AND MEDICINAL PROPERTIES OF PUMPKIN SEED AND ITS IMPORTANCE IN FOLK MEDICINE****QOVOQ URUG'INING KIMYOVIY TARKIBI VA DORIVOR XUSUSIYATLARI VA UNING XALQ TABOBATIDAGI AHAMIYATI****ХИМИЧЕСКИЙ СОСТАВ И ЛЕЧЕБНЫЕ СВОЙСТВА СЕМЯН ТЫКВЫ И ИХ ЗНАЧЕНИЕ В НАРОДНОЙ МЕДИЦИНЕ****Askarov Ibrohim Rahmonovich<sup>1</sup>**<sup>1</sup>Doctor of chemical sciences, Professor, Andijan State University Honored Inventor of Uzbekistan, Chairman of the TABOBAT Academy of Uzbekistan**Anvarova Mahliyo Marufjon qizi<sup>2</sup>**<sup>2</sup>Teacher, Andijan State University**Annotatsiya**

Maqolada oshqovoq urug'ining kimyoviy tarkibi va shifobaxsh xususiyatlari haqida ma'lumotlar keltirilgan. Oshqovoq urug'ining kunlik iste'mol qilish me'yorlari va bundan organizmga kerakli moddalarni qancha qismini to'ldirish mumkinligi keltirilgan. Oshqovoqning kimyoviy tarkibi, shifobaxsh xossalarini, insonlarning kunlik hayotidagi normasi va kunlik ehtiyojini necha foizini qondirishi bo'yicha ma'lumotlar berilgan. Kelib chiqishi tabiiy dorivor o'simliklardan olingan mahsulotlar nafaqat o'z dolzarbligini saqlab qolmoqda, balki tobora dunyoning turli mamlakatlari olimlarining tadqiqot obyektlariga aylanmoqda.

Shunday tabiiy manbalar qatoriga oshqovoq kiradi. tadqiqotimiz davomida mahsulot tarkidagi flavonoidlar,  $\beta$ -karotinoidlarni umumiy miqdori hamda fitakimyoviy tekshiruvlar orqali antioksidantlik faolligi aniqlangan natijalar keltirilgan. Oshqovoq urug'i foydali bo'lib, undan oziq-ovqat qo'shilmasi tayyorlash tavsiya etiladi. Oshqovoq o'zining boy kimyoviy tarkibiga ega ekanligi dunyoning bir qator ilmiy markazlarida tadqiqot obyektlariga aylanmoqda. Ushbu tendensiya tabiiy ravishda, bir tomondan, ulardan foydalanishning tarixiy isbotlangan samaradorligi va boshqa tomondan, toksik hamda sintetik dorilar bilan solishtirganda yonaki ta'sirga ega emasligi bilan ajralib turadi. Zamonaviy ilmiy adabiyotlar ma'lumotlarini tahlil qilish natijasida oshqovoq tarkibidagi biologik faol birikmalar sinfidan flavonoidlar ko'p o'rganilgan.

**Аннотации**

В статье представлена информация о химическом составе и целебных свойствах тыквенных семечек. Приведены нормы суточного потребления тыквенных семечек и сколько из них можно восполнить необходимыми организму веществ. Представлены данные о химическом составе тыквы, ее целебных свойствах, о норме в повседневной жизни человека и о том, на какой процент она удовлетворяет суточную потребность. Продукты природного происхождения, полученные из лекарственных растений, не только сохраняют свою актуальность, но все чаще становятся объектами исследований ученых разных стран мира.

Среди таких природных источников-тыква. В ходе нашего исследования были получены результаты по общему содержанию флавоноидов,  $\beta$ -каротиноидов в продукте, а также по антиоксидантной активности с помощью фитохимических тестов. Тыквенные семечки полезны, из них рекомендуется приготовить пищевую добавку. Тыква благодаря своему богатому химическому составу становится объектом исследований в ряде научных центров мира. Эта тенденция, естественно, характеризуется, с одной стороны, исторически доказанной эффективностью их использования и, с другой стороны, отсутствием побочных эффектов по сравнению с токсичными и синтетическими лекарствами. В результате анализа данных современной научной литературы было много изучено флавоноидов из класса биологически активных соединений, содержащихся в тыкве.

**Abstract**

The article provides information on the chemical composition and healing properties of pumpkin seeds. The norms of daily consumption of pumpkin seeds and how much of the necessary substances can be replenished for the body from this are presented. data is given on the chemical composition of pumpkin, its healing properties, the norm of human daily life and how many percent it satisfies its daily needs. Products from natural medicinal plants of origin not only retain their relevance, but are increasingly becoming objects of research of scientists from different countries of the world.

Such natural sources include pumpkin. during our study, the results of the total amount of flavonoids,  $\beta$ -carotenoids in the product Tark were presented, as well as antioxidant activity through phytochemical tests. Pumpkin seeds are useful, from which it is recommended to prepare a food additive. Pumpkin has its rich chemical composition, which is becoming objects of research in a number of scientific centers around the world. This trend is characterized naturally, on the one hand, by the historically proven effectiveness of their use and, on the other hand, by the fact that it

## KIMYO

does not have side effects compared to toxic and synthetic drugs. As a result of the analysis of data from modern scientific literature, flavonoids from the class of biologically active compounds contained in pumpkin have been studied a lot.

**Kalit soʻzlar:** Oshqovoq, urugʻ, yogʻ, oqsil, uglevod, karatinoidlar, makroelementlar, mikroelementlar, vitamin, xolin.

**Ключевые слова:** Тыква, семена, жир, белок, углеводы, каратиноиды, макроэлементы, микроэлементы, витамины, холин.

**Key words:** Pumpkin, seed, oil, protein, carbohydrate, caratinoids, macronutrients, microelements, vitamins, choline.

## INTRODUCTION

Pumpkin grows in tropical and subtropical climates. The homeland of pumpkin is Latin America. They are common in Eastern Europe and Mexico. Today, pumpkin is grown in almost all countries of the world.

Pumpkin is an annual and perennial plant belonging to the family of pumpkins. The stem of the pumpkin is a plant that grows to 4-5 m. The stem is jagged, coarsely hairy, and grows together with the help of spikes. The leaf is large heart-shaped, deeply five-lobed, coarsely hairy, arranged in a row on the stem by means of a long band. The flowers of the plant are pollinated from the outside by bisexual large, yellow, squash bugs. The fruit is a large, multi-seeded serrate and juicy fruit of various shapes.

Pumpkin blooms in July-August, the fruit ripens in August-October. The plant is not found in the wild, it was cultivated in Mexico 3 thousand years ago. Pumpkin was brought from the Americas in the 15th century, and it quickly began to be cultivated in all European countries. Common pumpkin is currently grown in almost all countries of the world. We use pumpkin fruits in the form of food products, dietary food, and also as a healing blessing [1,2,3].

## LITERATURE ANALYSIS AND METHODS

The fleshy part of pumpkin contains up to 11% sugar, starch, protein, vitamins C, B1, B2, nicotinic acid, cartinoets, eratericin A, phytoserones, as well as mineral salts, trace elements potassium, calcium, magnesium, especially phosphorus and iron compounds [3,4].

**Table 1. Chemical composition of pumpkin seeds and kcal per 100g**

<b>Nutrient</b>	<b>The amount in 100g fruit</b>	<b>Daily need</b>	<b>The percentage of the need out of 100 g</b>	<b>The amount in 100 Kcal in percentage</b>	<b>The amount in 100 per cent in grams</b>
Calories	559 Kcal	1684 Kcal	33.2%	15.6%	3583 g
Proteins	30.23 g	76 g	39.8%	0.318%	9500 g
Fats	49.05 g	56 g	87.6%	0.35%	14000 g
Carbohydrate	4.71 g	219 g	2.2%	0.17%	2704 g
Nutritional fiber	6 g	20 g	30%	5.4%	526 g
Watery	5.23 g	2273 g	0.2%		2712 g
Fatty acid of omega-3	0.12 g	0.9 - 3.7 g	13.3%	2.4%	
Fatty acid of omega-6	20.808 g	4.7 - 16.8 g	123.9%	22.2%	

**Table 2. Vitamins**

<i>Nutrient</i>	<i>The amount in 100g fruit</i>	<i>Daily need</i>	<i>Percentage out of the need from 100 g</i>	<i>The amount in 100 Kcal in percentage</i>	<i>The amount in 100 per cent in grams</i>
<i>Vitamin A,</i>	1 mkg	900 mkg	0.1%		90000 g
<i>Beta Carotene</i>	0.009 mg	5 mg	0.2%		55556 g
<i>Vitamin B<sub>1</sub>, thiamine</i>	0.273 mg	1.5 mg	18.2%	3.3%	549 g
<i>Vitamin B<sub>2</sub>, Riboflavin</i>	0.153 mg	1.8 mg	8.5%	1.5%	1176 g
<i>Vitamin B<sub>4</sub>, choline</i>	63 mg	500 mg	12.6%	2.3%	794 g
<i>Vitamin B<sub>6</sub>, pyridoxine</i>	0.143 mg	2 mg	7.2%	1.3%	1399 g
<i>Vitamin B<sub>9</sub>, folates</i>	58 mkg	400 mkg	14.5%	2.6%	690 g
<i>Vitamin C, ascorbic acid</i>	1.9 mkg	90 mg	2.1%	0.4%	4737 g

**Table 3. Macronutrients and micronutrients**

<i>Nutrient</i>	<i>The amount in 100g fruit</i>	<i>Daily need</i>	<i>Percentage out of the need from 100 g</i>	<i>The amount in 100 Kcal in percentage</i>	<i>The amount in 100 per cent in grams</i>
<i>Pottasium, K</i>	809 mg	2500 mg	32.4%	5.8%	309 g
<i>Calcium, Ca</i>	46 mg	1000 mg	4.6%	0.8%	2174 g
<i>Silicon, Si</i>	25 mg	30 mg	83.3%	14.9%	120 g
<i>Magnesium, Mg</i>	592 mg	400 mg	148%	26.5%	68 g
<i>Sodium, Na</i>	7 mg	1300 mg	0.5%	0.1%	18571 g
<i>Sulfur, S</i>	146 mg	1000 mg	14.6%	2.6%	685 g
<i>Phosphorus, P</i>	1233 mg	800 mg	154.1%	27.6%	65 g
<i>Chlorine, Cl</i>	80 mg	2300 mg	3.5%	0.6%	2875 g
<i>Iron, Fe</i>	8.82 mg	18 mg	49%	8.8%	204 g
<i>Iodine, I</i>	12 mkg	150 mkg	8%	1.4%	1250 g
<i>Cobalt, Co</i>	8.3 mkg	10 mkg	83%	14.8%	120 g
<i>Manganese, Mn</i>	4.543 mg	2 mg	227.2%	40.6%	44 g
<i>Copper, Cu</i>	1343 mkg	1000 mkg	134.3%	24%	74 g
<i>Molybdenum, Mo</i>	10 mkg	70 mkg	14.3%	2.6%	700 g
<i>Selenium, Se</i>	9.4 mkg	55 mkg	17.1%	3.1%	585 g
<i>Fluorine, F</i>	90 mkg	4000 mkg	2.3%	0.4%	4444 g

## KIMYO

<i>Chromium, Cr</i>	40 mkg	50 mkg	80%	14.3%	125 g
<i>Zinc, Zn</i>	7.81 mg	12 mg	65.1%	11.6%	154 g

**RESULTS AND DISCUSSION**

Pumpkin has long been valued as a remedy for various ailments. In the practice of folk medicine, we recommend a decoction made on the basis of fruit to patients with jaundice, chest pain, dry cough. The "flesh" of the fruit can be boiled in water and given as a diuretic in diseases of the kidneys, bladder, and stomach. [3,5].

It is recommended to apply the juice of the pumpkin to the affected areas of the skin. If the soft part of the fruit is crushed and applied to the infected skin, it cures the disease. If the dried bark is eaten, it cures diarrhea, bleeding from the stomach, and respiratory diseases. It is ground into powder and sprinkled on cut places to stop bleeding.

Abu Ali ibn Sina used a decoction of pumpkin fruit to treat chest pain and cough. He ordered to mix the fruit cooked in coals with sugar and eat it in order to soften the stool. In addition, he said that pumpkin juice can be used to treat sore throat and brain diseases.

In the medicine of Eastern peoples, it is recommended to cook the pumpkin by burying it in coals and pressing it on the painful areas of the hands and feet. Its fleshy part is burned, mixed with vegetable oil and applied to unhealed wounds [4,6].

It should be said that pumpkin contains a small amount of pectin, which in turn helps to remove cholesterol from the body. Pumpkin is recommended as a dietary food for atherosclerosis, medo-intestinal diseases (relief of constipation by improving the motor properties of the intestine).

Pumpkin fruit can also be used for urinary incontinence, cardiovascular disease, kidney disease, and swelling associated with bladder disease [1,2].

**CONCLUSION**

Pumpkin is called the queen of autumn crops. This is not surprising, because the pumpkin is large, bright, fragrant. It stands out from other vegetables in the garden. But pumpkin is loved not for its color and aroma, but for its useful properties. Not only the inner part of the pumpkin fruit, but also the seeds are useful. Pumpkin seeds are of great importance in treatment.

Pumpkin seeds contain many valuable elements. The length is about 0.5-1.2 cm. Covered with a hard white shell. It is eaten ripe, peeled and dry.

The oil content of pumpkin seeds is 40-50%, and the oil content consists mainly of unsaturated fatty acids. These fatty acids are omega-3 and omega-6. It affects the body's metabolism and cellular activity. It is important that pumpkin seeds contain more than other plants.

In conclusion, it can be said that the preparation of a food supplement from pumpkin seeds or its fat part is considered to be of great importance in folk medicine. With this in mind, we set out to develop pumpkin seed food supplements.

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