

ABOUT USEFUL MEDICINAL PLANTS RICH IN LIPIDS USED IN MEDICINE

Shukurova Shoxina Tuyg'unovna

Teacher of the "General Sciences" department of the
Asian International University

e-mail:shukurovashoxinatuygunovna@oxu.uz

Abstract. In this article, we can enrich the knowledge about medicinal plants containing lipids (sesame, almond, peach, olive, sunflower), teach them how to use them correctly, and form practical skills. We learn how to prepare tinctures and decoctions at home from medicinal plants containing lipids.

Basic concepts. Sesame seeds, almonds, peaches, olives, sunflower leaves, aboveground part of the plant (grass), shoots, barks, flowers, fruits and seeds, underground organs (roots, rhizomes, tubers and bulbs).

Enter. Common castor bean (*Ricinus communis*) belongs to the Euphorbiaceae family. The flowers are gathered in a shingle. The flower is inconspicuous, unisexual, the flower is simple, the mother flowers are located in the upper part of the peduncle, and the father flowers are located in the lower part. The fruit is three-seeded, three-lobed, and covered with thorns. It blooms in June-September, and the fruit ripens in July-October.



***Ricinus communis*- is the common castor bean**

Appearance of the seed. The seed is egg-shaped, covered with a shiny, hard, brittle, flowery skin. The bark is gray or light brown with red-brown spots and stripes. At the end of the seed there is a small white caruncle-seed growth. The weight of 1000 seeds is 800 g. There are large and small seed varieties of canacunjut. they differ from each other in terms of quantity. The large seed is 15-22 mm long, and the small one is 5-7 mm long. If the seed is not ripe (if the surface of the skin is not shiny), if it is crushed, it is considered to be of poor quality.

Sesame seeds are not used in medicine because they are poisonous. It serves only as an oil extractable product.

Chemical composition. The seed contains 40-56% non-drying oil, 14-17% protein substances, 0.1-1% ricinine and nicotine alkaloids, 18-19% fiber, lipase enzyme, strong poisonous protein substance - ricin and other substances.

Ricin is a protein containing 17 amino acids. The combination of 2 polypeptides with specific disulfide bonds (the first contains alanine and isoleucine, the second contains alanine-phenylalanine and serine) is the reason why ricin is extremely toxic.

Sesame oil used in medicine is extracted from the seeds by cold pressing method. Hot water vapor is passed through the oil to break down the poisonous substance - ricin. Sesame oil is a yellowish clear dark liquid with an unpleasant smell and taste. It dissolves well in alcohol (unlike other oils). The oil hardens at a temperature of 10-18°C. The oil consists of 80-85% glycerides of ricinol (oxyoleic) acid. It also contains glycerides of stearic, oleic, linoleic and dioxystearic acids.

Sesame oil, oil emulsion, paste made from seeds and ointment made from undecylenic acid. Undecylenic acid is used in the treatment of skin diseases - dermatoses and psoriasis. In addition, the oil is included in Vishnevsky ointment and elastic collodion. melting, extreme viscosity and the property of spreading depends on the presence of oxyolein - ricinoleic acid in its composition. If the oil is heated at a high temperature, ricinoleic acid loses its hydroxyl group, and the oil loses its aforementioned properties. For this reason, sesame seeds are widely cultivated in China and India to use their oil as food.

Almond (*Amygdalus communis*)

There are 2 types of almonds, only the almonds

divided according to their bitterness: sweet almond - *Amugdalus communis*, bitter almond *Amugdalus bucharic*.



***Amygdalus communis* - almond blossom branch**

Appearance of the seed. The average length of an almond seed is 2 cm, and its width is 1.5 cm. When moistened with hot water, the skin moves quickly. The seed consists of two parts. The root and shoot of the embryo are located on three sides of the seed. Sweet almond seeds are odorless and have a pleasant oily taste. Bitter almond seeds are bitter and odorless when dry.

Sweet almond seeds should not contain broken seeds and bitter almond seeds. The oil in the broken seeds oxidizes and breaks down under the influence of air and moisture during the storage period of the seed (since it does not have a skin).

Chemical composition. Both almond seeds contain 45-62% oil, vitamin B2, 20% protein, 2-3% sucrose and emulsifying enzyme. 2.2-3.5% amygdalin glucoside is found in bitter almond seeds.

Almond oil used in medicine is obtained by cold pressing method. Almond oil is a dark, yellowish liquid with a density of 0.913-0.918. The oil should not solidify when cooled to a temperature of 10°C. Almond oil belongs to non-drying liquid oils, it contains 83% olein, 16% glycerides of linoleic acids and 0.5% non-hydrolyzable substances.

Medicinal preparations. Almond oil and oil emulsion, emulsion made from sweet almond seeds.

RESEARCH RESULTS

1. Sesame oil is used as the best suppository in medicine, as well as in gynecology and in the treatment of eye diseases, wounds, body burns, leishmaniasis and other skin diseases. Sesame oil promotes hair growth.

If sesame oil is heated under low pressure, at a temperature of 240-300°C, the ricinoleic acid in it is decomposed, forming heptaldehyde ethanol and undecylenic acid.

2. Emulsion made from peeled fresh almond seeds is used to relieve stomach and intestinal pains, and almond oil is used as a laxative.

CONCLUSION.

In pharmaceuticals, almond oil is used to dissolve some drugs (camphor, etc.) and to prepare ointments. Bitter almond juice extracted from the seeds of bitter almonds is used for pain relief and as a sedative. Sweet almonds are used in the food industry and perfumery. Due to the fungicidal (killing of parasitic fungi) undecylenic acid, it is used in the treatment of skin diseases - dermatoses and psoriasis.

List of references

1. Tuyg'unovna, S. S. (2023). USEFUL PROPERTIES OF THE MEDICINAL PRODUCT AND USE IN MEDICINE. *Gospodarka i Innowacje.*, 40, 179-181.
2. Tuyg'unovna, S. S. (2023). CHEMICAL COMPOSITION OF MEDICINAL PLANTS AND CLASSIFICATION. *EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE*, 3(11), 33-35.

3. Shukurova, S. (2023). DORIVOR ACHCHIQ BODOM URUG'INING SHIFOBAXSHLIGI, DORI TAYYORLASH USULLARI. Центральноазиатский журнал образования и инноваций, 2(10 Part 3), 116-120.
4. Tuyg'unovna, S. S. (2023). DORIVOR NA'MATAKNING FOYDALI XUSUSIYATLARI VA TIBBIYOTDA QO'LLANILISHI. TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIY JURNALI, 3(9), 11-13.
5. Shukurova, S. (2023). DORIVOR O'SIMLIKLARNING KIMYOVİY TARKIBI VA TASNIFI. Центральноазиатский журнал образования и инноваций, 2(11), 5-10.
6. Shukurova, S. (2023). KIYIKO'T VA YALPIZDAN FOYDALANISH USULLARI. Центральноазиатский журнал образования и инноваций, 2(12), 171-177.
7. Shukurova, S. (2024). TARKIBIDA GLIKOZIDLAR BO'LGAN DORIVOR O'SIMLIKLAR. Центральноазиатский журнал образования и инноваций, 3(1), 217-222.
8. Tuygunovna, S. S. (2023). Ways to Use Mint and Peppermint. EUROPEAN JOURNAL OF BUSINESS STARTUPS AND OPEN SOCIETY, 3(12), 20-23.
9. Tuygunovna, S. S. (2023). Medicinal Plants Containing Glycosides. EUROPEAN JOURNAL OF BUSINESS STARTUPS AND OPEN SOCIETY, 3(12), 24-27.
10. Tuyg'unovna, S. S. (2024). DORIVOR O'SIMLIKLAR XOMASHYOSINI ISHLATISHGA TAYYORLASH. ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ, 38(7), 123-132.
11. Tuyg'unovna, S. S. (2024). TARKIBIDA LIPIDLAR BO'LGAN DORIVOR O'SIMLIKLAR. ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ, 38(7), 133-140.
12. Tuyg'unovna, S. S. (2024). TARKIBIDA VITAMINLAR BO'LGAN DORIVOR O'SIMLIKLAR. ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ, 38(7), 141-147.
13. Ostonova, G. (2023). TURLI XIL STRESS OMILLARDAN GARMSEL OMILNING G 'O 'ZA BARG SATHIGA TA'SIRI. Центральноазиатский журнал образования и инноваций, 2(11 Part 2), 107-111.
14. Ostonova, G. (2023). ICHKI SEKRETSIYA BEZLARI FIZIOLOGIYASI. Центральноазиатский журнал образования и инноваций, 2(10 Part 3), 110-115.
15. Rashidovna, O. G. (2023). PHYSIOLOGY OF THE ENDOCRINE GLANDS. EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE, 3(11), 1-6.
16. Rashidovna, O. G. (2023). EFFECT OF SOILS WITH DIFFERENT LEVELS OF SALINITY ON COTTON GERMINATION IN FIELD CONDITIONS. EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE, 3(12), 116-119.
17. Rashidovna, O. G. (2023). THE EFFECT OF THE HARMSEL FACTOR ON THE LEVEL OF COTTON LEAVES FROM VARIOUS STRESSORS. EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE, 3(12), 105-107.
18. Ostonova, G. (2023). DALA SHAROITIDA TURLI DARAJADA SHO 'RLANGAN TUPROQLARNING G 'O 'ZA UNUVCHANLIGIGA TA'SIRI. Центральноазиатский журнал образования и инноваций, 2(12), 206-211.
19. Rashidovna, O. G. (2024). DALA SHAROITIDA TURLI DARAJADA SHO 'RLANGAN TUPROQLARNING G 'O 'ZANING ILDIZ SISTEMASIGA TASIRI. ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ, 38(7), 186-193.

20. Husniddinova, S. S. (2023). The Distribution, Reproduction and Importance of the Beetles in Nature. American Journal of Pediatric Medicine and Health Sciences (2993-2149), 1(9), 211-216.
21. Rashidovna, O. G. (2024). THE EFFECT OF DIFFERENT DEGREES OF SALINITY ON THE ROOT SYSTEM OF COTTON. ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ, 38(7), 194-201.
22. Rashidovna, O. G. (2024). OF SOILS WITH DIFFERENT DEGREES OF SALINITY GROWTH AND DEVELOPMENT DYNAMICS OF COTTON EFFECT. ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ, 38(7), 167-176.
23. Ostonova, G. (2024). TURLI DARAJADA SHO 'RLANGAN TUPROQLARNING G 'O 'ZANING O'SISH VA RIVOJLANISH DINAMIKASIGA TA'SIRI. Центральноазиатский журнал образования и инноваций, 3(1 Part 2), 73-80.
24. Yomgirovna, R. G. (2023). AGROBIOLOGICAL PROPERTIES OF BENTONITE IN AGRICULTURE. Gospodarka i Innowacje., 40, 179-183.
25. Rahimova, G. (2023). MAKTABLARDA BIOLOGIYA FANINI O 'QITISHDA ZAMONAVIY INTERFAOL METODLARDAN FOYDALANISH. Центральноазиатский журнал образования и инноваций, 2(10 Part 3), 103-109.
26. Yomgirovna, R. G. (2023). SCIENTIFIC ASPECTS AND EFFICACY OF BENTONITE USE IN AGRICULTURE. EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE, 3(11), 116-120.
27. Rahimova, G. (2023). QISHLOQ XO'JALIGIDA BENTONITDAN FOYDALANISHNING ILMIY JIHATLARI VA SAMARADORLIGI. Центральноазиатский журнал образования и инноваций, 2(11), 189-196.
28. Rahimova, G. (2023). SHO 'RLANGAN TUPROQLAR SHAROITIDA G 'O 'ZANING MORFOLOGIK BELGILARI VA RIVOJLANISHIGA BENTONITNING TA'SIRI. Центральноазиатский журнал образования и инноваций, 2(12), 141-145.
29. Yomgirovna, R. G. (2023). EFFECT OF SEED ENCAPSULATION ON COTTON YIELD. EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE, 3(12), 42-44.
30. Yomgirovna, R. G. (2023). FORMATION OF COTTON CROP ELEMENTS. EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE, 3(12), 113-115.
31. Rahimova, G. (2024). G'O'ZA HOSIL ELEMENTLARNING SHAKLLANISHI. Центральноазиатский журнал образования и инноваций, 3(1), 212-216.
32. Yomgirovna, R. G. (2024). EFFECT OF SEED ENCAPSULATION ON COTTON YIELD. ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ, 38(7), 116-122.
33. Yomgirovna, R. G. (2024). CHIGITNI BENTONID BILAN KAPSULA QILIB EKISHNING G'O'ZA HOSILDORLIGIGA TA'SIRI. ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ, 38(7), 109-115.
34. Yomgirovna, R. G. (2024). G'O'ZA O'SIMLIGIDA HOSIL ELEMENTLARNING RIVOSH LANISHI. ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ, 38(7), 102-108.

35. Rashitova, S. (2023). USE OF INTERACTIVE METHODS IN CHEMISTRY. International Bulletin of Medical Sciences and Clinical Research, 3(10), 115-119.
36. Rashitova, S. (2023). BENTONIT GIL KUKUNINI SORBSION XOSSASINI KIMYOVIY USULDA FAOLASHTIRISH. Центральноазиатский журнал образования и инноваций, 2(10 Part 3), 98-102.
37. Shukhrat, R. S. (2023). PROCUREMENT OF SORBENTS WITH HIGH SORPTION PROPERTIES AND WASTEWATER TREATMENT ON THEIR BASIS. EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE, 3(12), 75-76.
38. Рашитова, Ш. (2023). ИСПОЛЬЗОВАНИЕ АКТИВИРОВАННОГО СОРБЕНТА ДЛЯ ОЧИСТКИ СТОЧНЫХ ВОД. Центральноазиатский журнал образования и инноваций, 2(12), 135-140.
39. Рашитова Ш.Ш. (2023). ПРИМЕНЕНИЕ АКТИВИРОВАННОГО СОРБЕНТА ДЛЯ ОЧИСТКИ СТОЧНЫХ ВОД . Новости образования: исследование в XXI веке, 2(16), 656–672.
40. Mukhriddin, T. (2023). XENOBIOTICS AND THEIR TYPES. EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE, 3(10), 14-17.
41. Mukhriddin, T. (2023). A LARGE-SCALE ANALYSIS OF RARE PLANTS DISTRIBUTED IN THE NUROTA RESIDUE MOUNTAINS. EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE, 3(12), 111-1
42. Muxriddin, T. (2023). KSENOBIOTIKLAR VA ULARNING TURLARI. TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIY JURNALI, 3(11), 220-223.
43. Mukhriddin, T. (2023). DEMOGRAPHIC INDICATORS OF XENOPOPULATIONS AND XENOPOPULATION. EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE, 3(11), 69-71.
44. Тешаев, М. (2023). ЦЕНОПОПУЛЯЦИЯЛАРНИНГ ДЕМОГРАФИК КЎРСАТКИЧЛАРИ ВА ЦЕНОПОПУЛЯЦИЯ. TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIY JURNALI, 3(9), 134-140.
45. Isomiddin o'g'li, T. M. (2024). QO 'RIQXONADA UCHRAYDIGAN SUTEMIZUVCHI HAYVON TURLARI VA BIOLOGIYASI. ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ, 38(7), 157-166.
46. Isomiddin o'g'li, T. M. (2024). QO 'RIQXONANING TASHKIL ETILISHI VA FIZIK-GEOGRAFIK TAVSIFI. ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ, 38(7), 148-156.
47. Azamat o'g'li, A. A. (2023). ROLLI O 'YINLARNI KIMYO FANI MASHG 'ULOTLARINING SIFATIGA TA'SIRI. TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIY JURNALI, 3(9), 131-133.
48. Azamat ogli, A. A. (2023). VANADIY (IV) IONI BILAN HOSIL QILINGAN MODDALARNING XOSSALARINI ORGANISH. TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIY JURNALI, 3(10), 305-308.
49. Azamat ogli, A. A. (2023). STUDYING THE STRUCTURE AND ELECTRONS OF PIRACETAM MONOSULFATE BY QUANTUM CHEMICAL METHOD. EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE, 3(12), 108-110.
50. Akbar, A. (2023). DORI MODDALARINING KVANT KIMYOVIY HISOBBLASHLARI VA ELEKTRONLARINING TABIATI. TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIY JURNALI, 3(11), 100-104.

51. Azamat ogli, A. A. (2023). PIRATSETAM MONOSULAFAT TUZILISHINI VA ELEKTRONLARINI KVANT KIMYOVIY USULDA ORGANISH. *TA'LIM VA RIVOJLANISH TAHЛИI ONLAYN ILMIY JURNALI*, 3(12), 286-288.
52. Azamat o'g'li, A. A. (2023). KANAKUNJUT O 'SIMLIGINING DORIVOR XUSUSIYATLARI. *TA'LIM VA RIVOJLANISH TAHЛИI ONLAYN ILMIY JURNALI*, 3(5), 200-202.
53. Azamat ogli, A. A. (2023). The Effect of Using Interactive Methods in Teaching Chemistry to School Students on Educational Efficiency. *Central Asian Journal of Medical and Natural Science*, 4(5), 771-774.
54. Azamat o'g'li, A. A. (2023). QUANTUM CHEMICAL CALCULATIONS AND ELECTRON NATURE OF DRUG SUBSTANCES. *EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE*, 3(11), 64-68.
55. Boltayeva Shahribonu Ahmad qizi. Tirnoqgul o'simligining dorivorlik xususiyatlari va dori tayyorlash usullari. *Analytical Journal of Education and Development*. (14-17)
56. Sh, B. (2023). PREPARATION OF EMULSIONS FROM OIL EXTRACTS AND EVALUATION OF QUALITY INDICATORS. *TA'LIM VA RIVOJLANISH TAHЛИI ONLAYN ILMIY JURNALI*, 3(6), 215-218.
57. Boltayeva, S. (2023). PREPARATION OF EMULSIONS FROM OIL EXTRACTS AND EVALUATION OF QUALITY INDICATORS. *Центральноазиатский журнал образования и инноваций*, 2(10 Part 3), 93-97.
58. Boltayeva, S. (2023). GIDROLIZLANGAN POLIAKRILONITRILNING EPIXLORGIDRIN BILAN O'ZARO TA'SIRI JARAYONINI O'GANISH, OLINGAN BIRIKMALARNING TUZILISHINI ANIQLASH. *Центральноазиатский журнал образования и инноваций*, 2(11), 71-76.
59. Boltayeva, S. (2024). KIMYO FANINI O 'QITISHDA INNOVATSION TA'LIM TEXNOLOGIYALARDAN FOYDALANISHNING AFZALLIKLARI. *Центральноазиатский журнал образования и инноваций*, 3(1 Part 2), 69-72.
60. Boltayeva, S. (2023). O'ZARO BOGLANGAN POLIMERLAR ASOSIDA YANGI GIDROGELLAR SINTEZI, VA NATIJALARINI O'GANISH
61. Ergasheva Gulshan Toxirovna. (2024). GIPERPROLAKTINEMIYA KLINIK BELGILARI VA BEPUSHTLIKKA SABAB BO'LUVCHI OMILLAR. *Лучшие интеллектуальные исследования*, 14(4), 168–175. Retrieved from <http://web-journal.ru/index.php/journal/article/view/3057>
62. Ergasheva Gulshan Toxirovna. (2024). QANDLI DIABET 2-TUR VA O'LIMNI KELTIRIB CHIQARUVCHI SABABLAR. *Лучшие интеллектуальные исследования*, 14(4), 86–93. Retrieved from <http://web-journal.ru/index.php/journal/article/view/3048>