

## INTRODUCED NETHERLANDS TULIP VARIETIES IN THE CLIMATE CONDITIONS OF THE PROVINCE CARE

Kurbanov Ibragimjon Sharifboevich

Senior Teacher of the Department "Ornamental Gardening and  
Landscaping" of the Namangan Institute of Engineering and Technology.

Phone: (+99893) 4930909 E-mail: ibo\_0212@mail.ru

### **Abstract:**

In the climatic conditions of the Namangan region, during the years 2018-2021, scientific research was conducted on irrigation, fertilization and agrotechnics of 16 types of tulips introduced from the Netherlands.

**Keywords:** Tulip, landscape gardening, wild tulip, species, ovoid, irrigation.

### **Introduction**

About 140 species of wild tulips grow in Southern Europe, Central Asia and North Africa. There are 83 species in the Central Asian republics. Kaufman, Foster and Greig tulips are the starting material for the creation of new class types.

Tulip bulbs are ovoid, conical in shape, rounded, brown, covered with a brown membrane, the base and the part where it joins the mother bulb is not covered with a membrane. Beneath the rind is a nutrient-rich, fleshy extra-rind that contains a couple of small bulbs attached to the base. These bulbs are formed due to the nutrients of the pod shell. Sometimes two layers of outer flesh form a strong shell and serve to protect the onion from drying out, various diseases and pests. A tulip bulb consists of several concentric, thick fleshy pods, which resemble open half-cones that are inserted into each other. Among these are the buds that form the tulip flower, flower stem and leaf. They are one bud in an additional pod attached to the base of the bulb with its lower part, and then a tulip bulb will develop from these buds. The bud, which temporarily acts as a bud, is located at the base of the flower stem, which later turns into a tulip bulb.

After planting a tulip bulb, roots form around the base of the bulb, the central bud begins to sprout a lance-shaped branch that allows it to pierce the soil, the leaves become larger and larger, and the flower stem lengthens. All the shoots located between the fleshy pods begin to grow due to the nutrients in the pods and the nutrients coming through the green leaves. By the end of the growing season, only dry membranous pods and old roots remain from the fleshy pod.

varies from 1 to 5-6. The lower part of the flower stem has slightly larger, ovate pointed leaves, and the upper part has ribbon-like, thickly pubescent, waxy, dark green or bluish leaves. When planted, a large onion produces one very large leaf, which then produces a rather large round onion. The flower stalk is 15-70 cm long and has a single calyx at the end. In the following years, tulip varieties appeared with bunch flowers, with several branches from the flower stem, each with 10 calyxes at the end, but their flowers are not very beautiful because they are not arranged evenly and do not open.

Tulips grow well in well-fertilized soil. To improve the soil composition, humus, compost is added to it, and large-grained sand is sprinkled on it. Application of non-rotted fertilizers will cause rotting of the root part of the tulip onion and the complete drying of the onion. Therefore, in the spring and summer months, the gunk is sprinkled with water from time to time and rotted. When it is time to plant tulips in October, it turns into a good humus, after which the humus is sifted and cleaned from the roots of autumn crops, golden beetle larvae, and autumn rust.

Before planting, tulip bulbs are cleaned of brown skin and kept for 30 minutes in a 1% solution of TMTD or 0.2% pi fundozol against fungal bacterial diseases. A 0.2% solution of BI-58 is used against the onion mite.

Tulips are planted to a depth of 8-12 cm, taking into account the size of the bulb, and slightly less in heavy soils. This is done as follows: the depth of 12-18 cm, width equal to the width of the spade is taken (it is advisable to do this with a spade with a flat bottom). The bottom of the egat is leveled. If the soil is dry, water is poured into the soil, sand is sprinkled with a thickness of 2 cm, and the onion head is picked in 2 rows, slightly pressing on the ground. The distance between rows should be 15-18 cm, and the distance between bulbs should be 8-12 cm. 25 cm from the row of planted onion heads, a new field is opened. Bulbs planted in the first layer are buried with soil.

As soon as the tulip blooms, the formation of bulbs begins. Depending on the weather conditions, the onion heads will be ready after about 35-45 days. Bulbs can be dug up after the tulip leaves begin to turn yellow, but before they are completely dry. It is dried for 7-10 days in a closed place, away from direct sunlight, it is cleaned from roots and old bark, and disinfected in fundazol, TMTD solutions. After drying, it is advisable to store the bulbs in boxes, kapron, gauze bags in dark rooms with a temperature not lower than 20°C. The flower stem, leaves and flower develop during storage of the bulb. Further development of flowers depends on optimal conditions and temperature during cultivation.

### **Planting of Tulip Bulbs:**

The process of planting tulip bulbs brought from the Netherlands was carried out with the active participation of specialists of the Namangan Regional Floriculture Development Center and scientists of the institute. For the plantation, according to the conclusion of comprehensive studies of experts, Tuya Taldi Massif of Kosonsoy District of Namangan Region, whose climatic conditions meet the requirements, was selected and 3.5 hectares of land area was allocated from the territory of the district. From the Netherlands tulip 2 million 300 of 16 types of onions in 32 different colors a thousand pieces were brought. Lola climate to the conditions adaptation, its maintenance and selection to the road put get in order to Specialist from the Netherlands too offer done \_ K delivered tulip onions modern technical tools using variety, color and another natural features looking planting works were carried out.

Tulip bulbs imported from the Netherlands were planted for 3 days based on a number of existing agrotechnical measures from the point of view of scientific research. Of

course, before planting, the soil was prepared for tulips, that is, it was necessary to use a cultivator and barone many times to prepare the soil. The process of planting tulip bulbs, since most of the soil in the territory of Uzbekistan is gray soil, special equipment (aggregate) brought from the Netherlands was used. Tulip bulbs 75 cm were planted in wide egates. The main purpose of planting tulip bulbs 75 cm in the aggregates is that the special technique (aggregate) for planting tulip bulbs is adapted to the soils of Uzbekistan and the ease of watering. Tulip bulbs can be planted from the second ten days of October to the end of November. Flowers that have adapted to the soil go to "sleep" as soon as the roots get cold. Planting time may vary depending on the soil temperature in the regions. Tulip bulbs should be planted at a depth of 15-25 cm, when the soil temperature is +7° +9° degrees. If the temperature is high, tulips will sprout and die at the first frost.

At lower soil temperatures, it is difficult for tulips to acclimatize to the cold, and as a result, they will germinate late in the spring. Onions 25 cm were planted in 3-5 rows to a depth of 15 with special equipment (aggregate). Tulip bulbs are very moisture-loving, when the soil is wet, the leaves curl, the bulbs do not grow enough, and it is difficult for the bulbs to germinate.

### **Watering and fertilizing:**

Tulip bulbs do not need much water after they are planted in the ground, because it is autumn-winter season, they are watered once. Thus, in the spring, tulips were watered once again during the period of 2 ears of leaves. In general, in the climatic conditions of Uzbekistan, tulip bulbs are irrigated at least 3-4 times from planting to harvesting.

The soil should maintain the required level of moisture until the tulip blooms. If there is a lack of water in the soil, the amount and concentration of salts in it will quickly increase, and as a result, the activity of the roots will be disturbed. This leads to poor nutrition. As a result, the yield is drastically reduced. In our conditions, it is recommended to water tulips in the spring so that the soil is moistened to a depth of 14-15 cm.

In the fall, 2-3 weeks before planting, 1 sq. applying simple superphosphate from 50-80 grams per meter, 1 sq. It was observed that application of potassium-magnesium sulfate at the rate of 50-80 grams per meter and well-rotted compost brought good results. But when determining the amount of fertilizers, it is necessary to determine the condition of the soil in the exact place where tulips are planted by means of chemical analysis.

Care should be taken not to increase the amount of nitrogenous and potassium fertilizers in autumn, because these elements can increase the concentration of water-soluble salts in the soil and cause damage to tulips. In order to get good results, it is recommended to reduce the amount of potassium in the main fertilizer, after the ground freezes in the fall, to apply potassium chlorate on the ground, or to give potassium nitrate on the ground (at the rate of 50 grams per 1 square meter) in soils with low nitrogen content. In the period of active spring vegetation, the soil should be sufficiently moist and all nutrients should be present in it in sufficient (optimum) amounts. It is

impossible to get a high and quality harvest without spring feeding. The total concentration of salts in the soil should not exceed 0.3-0.4%. Feeding from the top of the soil is also desirable (up to 6-8 times), but the concentration of fertilizers should be lower.

### **Decapitation and harvesting of tulip bulbs:**

In mid-spring, decapitation is carried out after making sure that the tulips are in full bloom. This means that the head of all tulips is cut off. The reason is that tulip flowers spend nutrients on their flowers to form the seed endosperm. In this case, the amount of nutrients for tulip bulbs decreases and significantly affects productivity. The main purpose of the decapitation process is to increase the number of tulip bulbs and enlarge the tulip buds.

In order to get good and full tulip bulbs, it is necessary to pluck its flowers without leaves. If a tulip is cut off with one leaf, then 20-25% of the bulbs will be lost. If the tulip is cut with two leaves, it will reach 30-40%. The development of tulip seeds also negatively affects the yield of bulbs. It is better to break the flower of the tulip, not to cut it, because the sap of the infected plant can be transferred to another healthy plant.

Tulip bulbs should be dug up every year. If they are not dug up, then the amount of harvest will decrease sharply, onions will be small, weeds will multiply in the fields and various diseases will develop. The best time to harvest tulip bulbs is when their leaves turn yellow. From the beginning of June, the digging of tulip bulbs begins. Harvested crops were stored in cool and sun-protected warehouses until the next planting season. In particular, for 3 years, 16 varieties of tulips, namely Spar red, sobel pink, Wit rode punt, Dub rw, double red with white effe, Ridgedale orange, Brown semi double, NC Pride dark lilac, Crw 18 creamwhite, 61-or- 2 tulip varieties such as orangeyellow, Dana Winner white, Purple cloud, purple early blooming, Piet Paulusma yellow, Givency red with yellow effe, Lichte copex light pink, Bl 16-170 violet were carefully monitored from the process of planting to the process of phenological observation and harvesting of bulbs and the most productive varieties with a positive adaptation process to Uzbekistan conditions were recommended. In particular, in the varieties spar, barbara sobel, Givency spar, barbara sobel, Givency, the adaptation was not so positive, that is, the germination and productivity of the plant in the first year is usually 5-6 onions, and in the 7th 9 cmfraction, onions were obtained, and from the following years, tulips of this variety germinated from the soil. it was observed that the susceptibility to the disease and the number of crops decreased sharply. So, from a scientific point of view, it is not recommended to plant spar, barbara sobel, Givency varieties that could not adapt to the conditions of Uzbekistan . NS Pride, Crw 18, Dana winner, purple cloud, piet paulusma tulip varieties planted in the climatic conditions of Uzbekistan for 3 years, watering, fertilizing and all agrotechnical measures were carried out in the same conditions as the above varieties that could not adapt. The varieties with these names have had a positive adaptation process every year, i.e. the germination of tulip bulbs, the attractiveness and flatness of the crown of flowers, the greenness of the body and leaves, the productivity

during the harvesting process, i.e. having 6-9 bulbs per head, with the characteristics of 8-fraction, have yielded positive results. 12 cm has been achieved. Therefore, tulip bulbs of this NS Pride, Crw 18, Dana winner, purple cloud, piet paulusma varieties are recommended for planting in the conditions of Uzbekistan. Tulip varieties that are slightly adapted to the conditions of Uzbekistan, but the adaptation process is very passive, are: wit rode punt, double row, ridgedale, 61-or-2. It is not recommended to plant these varieties for harvest.

In conclusion, it can be said that based on the results of scientific research carried out for 3 years, based on the agrotechnical requirements, tulip bulbs brought from the Netherlands, spar, barbara sobel, Givenchy, in the climatic conditions of Uzbekistan Spar, barbara sobel, Givenchy varieties are not recommended for planting. Tulip bulbs of NS Pride, Crw 18, Dana winner, purple cloud, piet paulusma varieties are recommended for planting. This technology of growing tulips was identified as a new technology for growing tulip plantations on a large area for the first time in Uzbekistan and was recommended for production.

## LIST OF REFERENCES

1. SMisirova, S. A. "Systematic types of fungi of allocated and determined types from decorative flowers in conditions region Tashkent." Agricultural sciences 6.11 (2015): 1387.
2. Misirova, S. A. "Determining of the measure disease control ornamental crops during the growing season in the conditions Tashkent region." Global Journal of Bio-Sciences and Biotechnology 5.1 (2016): 119-124.
3. Abdumatalovna, Misirova Surayyo, and Sarimsaqova Nilufar Sobirjonovna. "Bioecology of Fungi-Pathogens of Flower Crops and the System to Combat Them." Agricultural sciences 7.08 (2016): 539.
4. MISIROVA, SA, and NN ERNAZAROVA. "FIGHTING MEASURES THE DISEASE CAUSES A VERY DANGEROUS FUNGAL SPECIES WIDESPREAD IN TASHKENT REGION." International Journal of Botany and Research (IJBR) 6 (2016): 5-12.
5. Misirova, Surayyo. "Technology of growing orchid flowers from seeds." E3S Web of Conferences. Vol. 390. EDP Sciences, 2023.
6. MISIROVA, SA. "TECHNOLOGY OF CULTIVATION AND REPRODUCTION OF ORNAMENTAL AND UNIQUE ORCHID FLOWER IN NAMANGAN CONDITIONS." World Bulletin of Social Sciences 17 (2022): 156-164.
7. Urmonovich, Numonov Otabek. "MANGOSTEEN NUTRITIONAL PRICE AND FUNCTIONAL PROPERTIES." ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ 14.5 (2023): 3-5.
8. Misirova, S. A. "BIOLOGICAL CHARACTERISTICS OF FUNGAL SPECIES THAT CAUSE DISEASES OF ONION FLOWERS AND MEASURES TO COMBAT THEM." (2022).

9. Misirova, S., and M. Haydarova. "Flowers from Nederland are Considered to Develop in the Climatic Conditions of Uzbekistan and Are Identified the types of Fungus." *Annals of the Romanian Society for Cell Biology* (2021): 5922-5929.
10. Misirova, S. A., et al. "Determination types of fungi-pathogens of ornamental flower crops in conditions region Namangan." *ISJ Theoretical & Applied Science*, 10 (66) (2018): 185-189.
11. Misirova, S. A., M. U. Davlatova, and Sh O. Tuhtaboeva. "Biological Characteristics of Fungal Pathogens of Bulb Flowers and Control Measures." *JournalNX*: 207-214.
12. Misirova, S., et al. "Growing Dutch tulips in Namangan region." *Bulletin of Agrarian Science of Uzbekistan* 1 (2021).
13. Sabirov, Ravshan Z., et al. "Volume-sensitive anion channels mediate osmosensitive glutathione release from rat thymocytes." *PLoS One* 8.1 (2013): e55646.
14. Rashidovna, Melanova Nazira, and Numonov Otabek Urmonovich. "Comparative Characteristics of the Leaving of Glutathione From Cells of Different Types." *International Journal on Orange Technologies* 2.10: 79-82.
15. Melanova, N. R., M. U. Davlatova, and O. Numanov. "The Effect of Extracellular Glutathione on the Regulation of Thymocyte Volume in Rats under Conditions of Hypoosmotic Stress." *Annals of the Romanian Society for Cell Biology* (2021): 7032-7038.
16. Sabirov, R.Z., Kurbannazarova, R.S., Melanova, N.R. and Okada, Y., 2010, January. Swelling-induced release of glutathione from rat thymocytes. In *JOURNAL OF PHYSIOLOGICAL SCIENCES* (Vol. 60, pp. S13-S13). 1-11-11 KUDAN-KITA, CHIYODA-KU, TOKYO, 102-0073, JAPAN: SPRINGER TOKYO.
17. Melanova, Nazira Rashidovna, and Sayyora Abdurahimova Yulchiyeva. "EFFECT OF EXTRACELLULAR GLUTATHIONE ON COLLOID-OSMOTIC LYSIS OF HUMAN RED BLOOD CELLS." *Scientific and Technical Journal of Namangan Institute of Engineering and Technology* 2.2 (2020): 144-149.
18. Choriyeva, Nargiza Mamarajabovna, and Nazira Rashidovna Melanova. "STUDY OF LYSIS OF HUMAN ERYTHROCYTES UPON ADMINISTRATION OF GOSSYPOL, MEGOSIN AND BATRIDEN." *Scientific and Technical Journal of Namangan Institute of Engineering and Technology* 1.9 (2019): 55-58.
19. Меланова, Назира Рашидовна. "Сравнительная характеристика выхода глутатиона из различных типов клеток." *Universum: химия и биология* 5 (59) (2019): 9-12.
20. Насритдинов, Ахмаджон Абдухамидович, and Хусниддин Тургунбоевич Киргизов. "Агрегат для полосной обработки почвы." *Современные научные исследования и инновации* 12 (2015): 412-416.
21. Байбобоев, Набижон Гуломович, et al. "Энергоресурсосберегающий комбинированный агрегат для обработки почвы." *Вестник Рязанского*

государственного агротехнологического университета им. ПА Костычева 3 (23) (2014): 42-44.

22. Насритдинов, А. А., and А. В. Рязанов. "Оптимальные условия установки углоснима." Техника в сельском хозяйстве 6 (2003): 34-35.

23. Насритдинов, Ахмаджон Абдухамидович. "Результаты исследования формы лобовой поверхности стойки чизеля-культиватора." Universum: технические науки 1 (58) (2019): 18-20.

24. Бойбобоев, Набижон Гуломович, and Ахмаджон Насритдинов. "Теоретические определение перемещение частиц почвы по поверхности углоснима." Science Time 6 (18) (2015): 84-89.

25. Misirova, S. A., M. U. Davlatova, and Sh O. Tuhtaboeva. "Biological Characteristics of Fungal Pathogens of Bulb Flowers and Control Measures." JournalNX: 207-214.

26. Шамситдинов, Ф. "Результаты опыта." Защита и карантин растений 5 (2003): 27-27.

27. Абдуалимов, Ш. Х., and Ф. Р. Шамситдинов. "Влияние применения стимуляторов роста на всхожесть семян, рост, развитие и урожайность хлопчатника в условиях светлых сероземных каменистых почв Наманганской области Республики Узбекистан." Актуальные проблемы современной науки 5 (2019): 47-51.

28. Абдуалимов, Шухрат Хамадуллаевич, and Фазлиддин Расулович Шамситдинов. "НАМАНГАН ВИЛОЯТИНИНГ ҚИР АДИРЛИ ТОШЛОҚ ЕРЛАРИДА ЯНГИ СТИМУЛЯТОРЛАРНИНГ ФЎЗА БАРГ ЮЗАСИ ВА ҲОСИЛДОРЛИГИГА ТАЪСИРИ." Журнал Биологии и Экологии 1 (2019).

29. Urmonovich N. O. MANGOSTEEN NUTRITIONAL PRICE AND FUNCTIONAL PROPERTIES //ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ. – 2023. – Т. 14. – №. 5. – С. 3-5.

30. Rashidovna, Melanova Nazira, and Numonov Otabek Urmonovich. "Comparative Characteristics of the Leaving of Glutathione From Cells of Different Types." International Journal on Orange Technologies 2.10: 79-82.

31. Abdukhamedovich, Nasritdinov Akhmadzhon, and Numonov Otagek Urmonovich. "The Results of Theoretical Studies of the Chisel Cultivator Rack Frontal Surface Shape." Annals of the Romanian Society for Cell Biology (2021): 5930-5938.

32. Abdukhamedovich, Nasritdinov Akhmadzhon, Muhabbat Davlatova Urmanovna, and Numonov Otabek Urmonovich. "Strip Till Age of Soil for Deuteric Sowing (Second Crop)." International Journal on Orange Technologies 3.4 (2021): 71-74.

33. Abduhamidovich N. A. et al. MANGOSTIN DARAXTI VA MEVASINI TIBBIYOTDA FOYDALANISH //Journal of new century innovations. – 2023. – Т. 28. – №. 2. – С. 12-14.

34. Melanova, N. R., M. U. Davlatova, and O. Numanov. "The Effect of Extracellular Glutathione on the Regulation of Thymocyte Volume in Rats under Conditions of

Hypoosmotic Stress." Annals of the Romanian Society for Cell Biology (2021): 7032-7038.

35. Рахманов, Дилшод Ортикбаевич, and Мұхаббат Ўрмоновна Давлатова. "ОРГАНОЛЕПТИЧЕСКИХ ОЦЕНКА СВОЙСТВ РЫБ И РЫБНЫХ ПРОДУКТОВ." O'ZBEKISTONDA FANLARARO INNOVATSIYALAR VA ILMIY TADQIQOTLAR JURNALI 2.14 (2022): 583-585.

36. Юсупова, Махпузা Нумановна. "БИОЛОГИЧЕСКИЙ МЕТОД ЗАЩИТЫ РАСТЕНИЙ." Scientific Impulse 1.9 (2023): 1460-1464.

37. Юсупова, Махпузা Нумановна. "АНОРНИ ЗАРАРКУНАНДАЛАРДАН ҲИМОЯЛАШ." PEDAGOG 6.4 (2023): 562-567.

38. Юсупова, Махпузা Нумановна. "САБЗАВОТ ЭКИНЛАРИГА БИОЛОГИК КУРАШ ҲАҚИДА МУЛОХАЗАЛАР." Scientific Impulse 1.9 (2023): 1469-1473.

39. Юсупова, Махпузা Нумановна. "ФАРФОНА ВОДИЙСИ ШАРОИТИДА ИГНА БАРГЛИ ДАРАХТЛАРНИ ЗАРАРКУНАНДАЛАРДАН ҲИМОЯЛАШ." SO 'NGI ILMIY TADQIQOTLAR NAZARIYASI 6.4 (2023): 316-320.

40. O'rmonovna, Davlatova Muhabbat. "MANGOSTIN DARAXTI VA UNING KIMYOVIY XUSUSIYATLARI." INNOVATION IN THE MODERN EDUCATION SYSTEM 3.25 (2022): 1-4.

41. Юсупова, Махпузা Нумановна. "УФТ: 635 САБЗАВОТ ЭКИНЛАРИГА БИОЛОГИК КУРАШ ҲАҚИДА МУЛОХАЗАЛАР." Научный импульс: 355.

42. Qurbanov, I. "Tulip varieties imported from the netherlands technology of cultivation of namangan region. galaxy international interdisciplinary research journal (giirj) issn (E): 2347-6915 Vol. 9." (2021).

43. Kurbanov, I. G. "CARE OF TULIP VARIETIES OF THE NETHERLANDS IN THE CLIMATIC CONDITIONS OF THE NAMANGAN REGION." American Journal of Interdisciplinary Research and Development 6 (2022): 117-120.

44. Qurbanov I. E-RECRUITMENT: SOCIAL MEDIA AND RECRUITING //InterConf. – 2021.

45. Qurbanov, Ibragim Sharifjonovich. "CLONELY MICRO-CULTIVATION OF PLANTS AND ITS APPLICATION TO AGRICULTURE." Scientific and Technical Journal of Namangan Institute of Engineering and Technology 1.4 (2019): 74-78.

46. Юсупова М. Н., Ахмедова М. М. МЕВАЛИ ДАРАХТЛАРНИ ЗАРАРКУНАНДАЛАРИГА ҮЙГУНЛАШГАН КУРАШ ЧОРАЛАРИ //ЖУРНАЛ АГРО ПРОЦЕССИНГ. – 2020. – Т. 2. – №. 8.

47. Ходжаев, Ш. Т., Сагдуллаев, А. У., Исаев, О. Б., & Юсупова, М. Н. (2011). Проблемы защиты растений в Узбекистане. Защита и карантин растений, (8), 23-24. Юсупова М. Особенности защиты хлопчатника посевенного под пленки от вредных организмов //Автореф. канд. дисс./М. Юсупова-Ташкент. – 2001.

48. Ходжаев, Ш. Т., Юсупова, М. Н., Курязов, Ш., & Саттаров, Н. (2008). Перспективы биологической защиты хлопчатника от хлопковой совки. Сб. трудов.-Ташкент: Таллин, 44-49.

49. Yusupova M. N., Nosirov B. Z. Pests of cotton and straw control at collection //EPRA International Journal of Multidisciplinary Research (IJMR)-Peer Reviewed Journal. – 2020. – T. 6. – №. 12. – C. 57-61.

50. Yusupova M. N., Axmedova M. M. Mevali daraxtlarni zararkunandalariga uygunlashgan kurash choralar //Jurnal JURNAL AGRO PROTSESSING. Data publikatsii. – 2020. – №. 8. – C. 12.

51. Yusupova M. N. Biological method of crop protection in the fergana valley //Agrarian science. – 2018. – №. 6. – C. 68-70.

52. Urmonovich, Numonov Otabek. "MANGOSTEEN NUTRITIONAL PRICE AND FUNCTIONAL PROPERTIES." ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ 14.5 (2023): 3-5.

53. MN, Yusupova, and B. Z. Nosirov. "Control Of Cotton Pests On Stubble Lands." International Journal of Applied 10.2 (2015): 99-108.

54. Юсупова М. Н., Тургунова А. Н., Очилов С. Н. Система интегрированной защиты растений //Российский электронный научный журнал. – 2015. – №. 1. – С. 169-174.

55. Alimzhanova Z. I., Kadyrova D. S., Yusupova M. N. Ceramic pigments based on raw materials from Uzbekistan //Glass and Ceramics. – 2014. – T. 70. – №. 11-12. – C. 441-443.

56. Yusupova M. N., Gapparov A. M. Biological Method Of Plant Protection In Uzbekistan //The American Journal of Agriculture and Biomedical Engineering. – 2020. – T. 2. – №. 11. – C. 29-32.

57. Rashidovna M. N., Urmonovich N. O. Comparative Characteristics of the Leaving of Glutathione From Cells of Different Types //International Journal on Orange Technologies. – T. 2. – №. 10. – C. 79-82.

58. Юсупова М. Н., Носиров Б. З. БИОЛОГИЧЕСКИЙ МЕТОД ЗАЩИТЫ РАСТЕНИЙ В УЗБЕКИСТАНЕ //Научно-практические пути повышения экологической устойчивости и социально-экономическое обеспечение сельскохозяйственного производства. – 2017. – С. 498-501.

59. Urmonovich, N. O. (2023). MANGOSTEEN NUTRITIONAL PRICE AND FUNCTIONAL PROPERTIES. ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ, 14(5), 3-5.

60. Yusupova M. et al. Protection of after harvest cultures-as a reservetors of cotton pests //Agriculture and Biology Journal of North America. – 2013. – T. 4. – №. 5. – C. 576-582.

61. Ходжаев, Ш. Т., Юсупова, М. Н., Юлдашев, Ф., Исаев, О. Б., & Шокирова, Г. (2011). Борьба с вредителями хлопчатника на пожнивных культурах в севообороте. Вестник защиты растений, (2), 46-52.

62. Yusupova M. N. et al. Possibilities of the biological method of cotton plant protection //Agriculture and Biology Journal of North America. – 2011. – T. 2. – №. 5. – C. 742-744.

---

63.Ходжаев, Ш. Т., Юсупова, М. Н., Юлдашев, Ф., & Жамалов, А. Г. (2010). Хлопковая совка на пожнивных культурах. Защита и карантин растений, (12), 22-23.

64.Хайдарова, Х. А., Юсупова, М. Н., Ихтиярова, Г. А., & Хайдаров, А. А. ПОЛУЧЕНИЕ ХИТОЗАНА ИЗ ПОДМОРА ПЧЕЛ APIS MILLIFERA. Сучасний рух науки: тези доп. XI міжнародної науково-практичної інтернет-конференції, 8-9 жовтня 2020 р.–Дніпро, 2020.–Т. 2.– 426 с., 352.

65.Yusupova M., Turgunova A., Ochilov S. INTERGRATED PLANT PROTECTION SYSTEMS.