

**CLASSIFICATION OF CITRUS ORANGE VARIETY "NUR"**

Bunyod Ballasov

Doctoral Student of Andijan Institute of Agriculture and Agrotechnologies

Muhamadaziz Fakhrutdinov

Doctoral Student of Andijan Institute of Agriculture and Agrotechnologies

Sirojiddin Jurayev

Tashkent State Agrarian University

**ABSTRACT**

Newly created citrus plants - "Uzbekistan" variety of orange, "Tashkent" variety of mandarin and "Pomelo Zaynutdin" local variety of grapefruit, grafted shoots to "F-2 Yubileynny" variety of lemon under greenhouse conditions and grown in low and small form by crossing maternal and paternal flowers, new varieties were created and put into production.

**Keywords.** Global, create, pure, identify, disease, productive, short, cost, cold, income, experiments, network, measure, young, created, source, branch, drug, yellow, nijhon, grain, branch, short, pubic roots , in raising, the root.

**SITRUS O‘SIMLIGI APELSINNING “NUR” NAVINING TASNIFI**

Ballasov Bunyod Maxammadali o‘g‘li

Andijon qishloq xo‘jaligi va agrotexnologiyalar instituti tayanch doktoranti

Faxrutdinov Muhamadaziz Zayniddinovich

Andijon qishloq xo‘jaligi va agrotexnologiyalar instituti tayanch doktoranti

Jo‘rayev Sirojiddin Turdiqulovich

Toshkent davlat agrar universiteti

**Annotatsiya**

Yangi yaratilgan sitrus o‘simliklari – apelsinning “O‘zbekiston” navi, mandarinning “Toshkent” navi va greypfruktning “Pomelo Zaynutdin” mahalliy navlari, issiqxona sharoitida limonning “F-2 Yubileynny” naviga kurtak payvandlab, past va pakana shaklda o‘stirib, onalik va otalik gullarini chatishtirib, yangi navlar yaratildi va ishlab chiqarishga tatbiq etildi.

**Kalit so‘zlar.** Global, yaratish, sof, aniqlash, kasallik, hosilli, qisqa, xarajat, sovuq, daromad, tajribalar, tarmoq, chora, yosh, yaratilgan, manba, novda, dori, sarg‘aygan, nimjon, dona, shox, qisqa, popuk ildizlar, oshirishda, ildiz.

## INTRODUCTION

With the development of the country and the ever-increasing population, the demand for food, especially for fruits and its processed products, their type and quality is also increasing. In particular, the demand for citrus fruits and their processed products stands out among all other fruit crops in terms of popularity.

Despite the fact that there are more than 30 types of citrus fruit crops in the world, about 10 of them are of industrial importance. Among them, mainly lemons are grown in Uzbekistan, while tangerines and oranges are grown in smaller areas. At the same time, ample opportunities are being created for the cultivation of lemons in protected areas in the republic. At the same time, most of the local varieties of oranges grown in our country have high productivity and resistance to diseases, and one of the important tasks is the creation and application of local regionalized varieties of oranges and mandarin grapefruits to production.

### **The purpose of the study**

In the selection of citrus plants, it is important to study the importance of growing small-growing, quick-ripening, high-yielding, certified and guaranteed citrus orange seedlings by hybridizing varieties and samples belonging to the same family.

## MATERIALS AND METHODS

The research was conducted on Uzbekistan orange, Tashkent mandarin, and grapefruit pomelo Zayniddin varieties.

### **The method of conducting the research depends on the sheep:**

- a) by studying the climate resistance of varieties belonging to the same family, mandarin oranges and grapefruits, creating selection materials that are resistant to greenhouses;
- b) to create new local varieties of promising citrus plants with high indicators of disease-resistant varieties of different origins and valuable characteristics for the main economy and to bring them to the status of varieties;
- c) grow a sufficient number of original seedlings for the establishment of nursery greenhouses for newly created citrus plant varieties;
- g) test new citrus plant varieties created in state and production tests.

## RESEARCH RESULT AND DISCUSSION

The origin of orange "NUR" variety. Experimental work was carried out on the basis of synthetic and analytical selection methods. When creating orange "NUR" variety (orange Washington Navel collection variety), lemon F-2 Jubilee variety was created by recrossing and reselection of orange Washington Navel hybrids in greenhouses using the methods of grafting and selection. Orange variety "NUR" is one of the medium-ripe varieties. Citrus plant height is 2.70-2.75 m.cm, small growing tree shape, flowers from the first layer crop branch. Crop branches are located close to the main stem. The branches of the plant grow upright and fast, the stem is dark green, and does not lie down. The leaf is thick, dark green in color. Side branches are numerous.

When the flower is big, the flower has maternal and paternal stamens, and when the maternal flowers mature, the paternal stamens also ripen and self-pollinate at the same time. The flowers turn into crops after pollination in 7-12 days. From flower to fruit, the crop matures in 7 months or 210 days. One fruit weighs 450 g to 1 kg, the skin of the fruit is medium thick, the fruit is round, the seeds are 5-6 pieces, the seeds are large. Orange variety "NUR" is a perennial small-growing tree, if a seedling is prepared from a cutting, it will live for 60 years, if it is grown from seeds and shoots, it will live for more than 100 years. Productivity is on average 60-80 kg per bush. After a certain period of flowering and ripening of the citrus fruit orange Uzbek variety, the crops begin to ripen intensively. The orange Uzbek variety of the citrus fruit plant differs in that the ripening process is somewhat shorter. High results can be achieved if the variety is planted in a greenhouse in a 2x2 checkerboard pattern.

**BRIEF INFORMATION ON OTHER ORANGE VARIETIES**

1-Table

Other varieties				
	Name and origin	Brief information	Properties	Fruits
Scarred oranges	<i>Citrus sinensis Bahianinha</i>	Height - 8 meters, flowers 3-4 cm sweet	Relatively short, compact	Oval, smaller than Washington Navel, very fragrant
	<i>Citrus sinensis Lane Late China</i>	Height - 8 meters, flowers 3-4 cm sweet	Similar to Washington Navel	Very soft, cleans after
	<i>Citrus sinensis Thompson Navel China</i>	Height - 8 meters, flowers 3-4 cm sweet	Small, slow growing	Very sweet
	<i>Citrus sinensis Trovita</i>	Height - 8 meters, flowers 3-4 cm	Adapts well to hot and cold humid places	Very fragrant, easy to clean
Light colored oranges	<i>Citrus sinensis Delta Seedless</i>	Height - 6 meters, flowers 3-4 cm	Compact branches, fertile variety	<i>Valencia is bigger than that</i>
	<i>Citrus sinensis Diller</i>	Height - 6 meters, flowers 3-4 cm	It is short and densely branched	Very runny and sweet, but with lots of seeds
	<i>Citrus sinensis Hamlin</i>	Height - 7 meters, flowers 3-4 cm	It is resistant to frost	Watery, soft, few seeds
	<i>Citrus sinensis Marrs</i>	Height - 7 meters, flowers 3-4 cmshirin	In the first years of its life, it gives a lot of crops	Early ripening, sweet, seedy
	<i>Citrus sinensis Pera</i>	Height - 7 meters, flowers 3-4 cmshirin	Fast growing, bumpy	Oval, low sugar content, few seeds
	<i>Citrus sinensis Pincapple</i>	Height - 8 meters, flowers 3-4 cmshirin	Grows at a medium speed, high yield	Watery, fragrant, sweet, but with many seeds
	<i>Citrus sinensis Salustiana</i>	Height - 8 meters, flowers 3-4 cm	It grows quickly, the branches are round	Tender, the meat is very soft
	<i>Citrus sinensis Shamount</i>	Height - 8 meters, flowers 3-4 cmshirin	It has vertical-oval branches	Oval, very fragrant, easy to clean, seedless
<i>Citrus sinensis Verna/Berna</i>	Bushy - 8 meters, flowers 3-4 cmshirin	Relatively short	An endangered variety, low in sugar and acid	

**CONCLUSIONS**

1. Orange "NUR" citrus plant variety was determined by synthetic and analytical methods of selection, re-selection method, resistance to fruitful disease and early ripening, and selection was analyzed in seed breeding processes.
2. The orange "NUR" citrus plant variety was created by the hybridization method of selection, and its difference from the control varieties is based on the study and analysis of genetic,

selection processes, its origin, fertility, disease, especially cold tolerance in greenhouse conditions.

3. Based on the analysis of orange "NUR" citrus plant variety in different greenhouse climatic conditions, resistance to cold and disease was determined in the water deficit regime compared to the optimal regime.

4. The orange "NUR" citrus plant variety was created by the hybridization method of selection, and the high quality of its origin, fruitfulness, sweetness of the harvest and servitainty was scientifically and practically justified.

5. The documents for obtaining a patent in 2024 were submitted by the Intellectual Property Agency of the Republic of Uzbekistan to "NUR", a promising variety of citrus plants.

### REFERENCES

1. Desyatchenko A.M. *Perespektivnye sorta sitrusovyx kultur dlya zashchennogo grunta Uzbekistana. Problemy razvitiya subtropicheskogo plodovodstva v Uzbekistane.* Tashkent. Mexnat - 1985 g.
2. Faxriddinov.M. *Limonchilikning o'ziga xos sinoatlari.* Tashkent. 2014 y.
3. Faxrutdinov M.Z. Jo'raev S.T. *sitrus seleksiya yutug'i O'zbekistonda.* "O'zbekiston qishloq va suv xo'jaligi" jurnali. – Toshkent, 2022. – Maxsus son. – B. 30-31.
4. Faxrutdinov M.Z. Jo'raev S.T. *O'zbekistonda sitrus o'simliklar seleksiyasi.* *Jornal of Modern Philosophy Social Sciences and Humanities* (January, 2023). – Krakow, Poland, 2023. – Volume 14. – P. 133-140.
5. Faxrutdinov M.Z., Jo'raev S.T., Rajametova S.Sh. *Newly created propagation of citrus seedlings in a short term.* *BRITISH JOURNAL of Global Ecology and Sustainable Development.* Volume-24, January, 2024. – P.143-149.