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EFFICACY OF CREATING VITAMIN-RICH VARIETIES OF LEMON

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ABSTRACT

The article talks about the effectiveness of creating local varieties of lemon rich in vitamins.

Keywords: lemon, rich in vitamins, variety, creation, efficiency.

LIMONNING VITAMINGA BOY MAHALLIY NAVLARINI YARATISH SAMARADORLIGI

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ANNOTATSIYA

Maqolada limonning vitaminga boy mahalliy navlarini yaratish samaradorligi haqida gap borgan.

Kalit so’zlar: limon, vitaminga boy, nav, yaratish, samaradorlik.

INTRODUCTION

"Citrus plants are grown in more than 90 countries around the world today, and the USA, Brazil, Japan, Italy, Argentina, Turkey, Morocco, Mexico and other countries are the leaders in export." In recent years, as a result of the negative consequences of global climate change, it has been observed that the costs of growing citrus fruit plants in open and closed conditions are increasing. This situation has a negative impact on the net income from the product. That is why, by determining the properties of quick ripening and disease tolerance

of citrus fruit plants, creating high-yield varieties of citrus fruit plants that ripen in a short period of time, which have the ability to give the main crop before the frost, is an urgent problem.

Decree of the President of the Republic of Uzbekistan No. PQ-3586 of March 6, 2018 "On measures to further develop the lemon growing industry in the Republic of Uzbekistan", No. PQ-4610 of February 19, 2020 "On further development of the lemon growing industry" Decisions "On additional measures" and PQ-55 of December 20, 2021 "On additional measures to develop family entrepreneurship and expand the source of income of the population" and other regulations These studies serve to a certain extent in the implementation of the tasks defined in the legislative documents.

RESEARCH RESULTS

The purpose of the research: to create starting materials for new varieties of lemon from introduced varieties, the main goal of the research is to select grafts suitable for each lemon variety and to create varieties rich in vitamins, high sugar level, fertile and resistant to cold.

Task of the research: To achieve the above goals, the following tasks were performed:

- separation of introduced and local varieties and hybrids of lemon according to valuable economic characteristics;
- study of morphological characteristics of introduced lemon varieties;
-. selection of suitable cuttings for growing lemon seedlings;
- conduct optimal methods of creating lemon varieties;
- studying the growth dynamics of lemon seedlings.

Research methods: conducting field experiments, planting, phenological observations, biometric measurements, plant care, yield determination. Sources of the Ministry of Agriculture of the Republic of Uzbekistan, the Research Institute of Plant Science of Uzbekistan, the State Commission for Testing Varieties of Agricultural Crops, "Metodika Gosudarstvennogo sortoispitaniya selskohozyaystvennix kultur" , "Methods of Conducting Field Experiments" based on methodological manuals and statistical analysis of the results obtained by B.A. It is performed according to the method indicated by Dospekhov.

Lemon Citrus retiiculata Blanco variety Climintine is an Italian variety, introduced from Georgia. The bush is small pyramidal, the branches are thick, the leaves are thin, the branches are thin. The leaf is small, long, pointed, shiny. The flower is white, small, very fragrant, clustered. The fruit is medium-sized or small, flat spherical, weighing 65-75 g. The skin is orange, thin, almost smooth, with thick fat glands on it, it is easily separated from the flesh, the weight of the skin is 28-30% of the total weight of the fruit. The flesh is orange, grainy, soft, juicy, with a unique smell. Its juice is sour-sweet, it contains 10% sugar, 1% acid, the fruit has up to 20 seeds. The acid content of the juice is 1.02%, sugar content is 8.1%, vitamin C is 44 mg%. Characteristic of the variety - in the sixth year after planting, the yield from one bush reaches 23 kg. 53 67-book Cultivation of citrus fruit plants Miagawa Vase was introduced from Georgia (VIR selection of Sukhumi subtropical plant experiment station). Tupi is short. The bush is smaller, 1.5-2.0 meters tall. The trunk is compact, the branches are short, serbarg. The leaf is medium-sized, round-oval in shape, the base is

round, the edges are slightly bumpy, dark green in color, and there are small wings on the leaf band. The flower is white, small, very fragrant, clustered. The fruits are medium-sized, round in shape, weighing 80-100 grams. The skin is thick, yellow, and does not separate easily from the flesh. The juice contains 1.4% various acids, 7.2% sugar, 44 mg/% vitamin C. The characteristic of the variety is that it yields in the second year after planting in greenhouse conditions. In the fourth year, each bush yields 5-6 kg and more. 54 100 book collection Kavano vase Georgia (selection of the Sukhumi Subtropical Plant Experiment Station VIR) variety, low bush. The bush is smaller, the branches are compact. It reaches 1.5-2.0 meters in height. Branches are short, serbarg. The flower is white, small, very fragrant, clustered. The fruit is round, medium-sized, weighing 120-140 g. The skin is light yellow, the taste is sour-sweet. Its juice contains 0.6-0.8% acid, 6.5-7.0% sugar, 15-20 mg% vitamin C. Variety feature - 6-5 years after planting, some bushes can yield up to 12-15 kilograms. 55 67-book Cultivation of citrus fruit plants "Ponkan" variety - wild forms are found in India. The bush is tall, pyramidal, its branches grow upright, its height reaches 2.5-3 meters. The branches are covered with long, medium-sized leaves. The leaf is oval-long - 9 cm, the base is round, the edges are slightly bumpy. The flower is white, small, very fragrant, clustered. The fruit is large, the base is round, it weighs 100-110 grams. The skin is light yellow, easily separated from the flesh, the taste is sweet and sour. Seed - 8-12 multi-branched. The juice contains 0.7-0.8% acid, 7.0-8.5% sugar, 15-20 mg% vitamin C. Variety feature - after planting, 5-6 individual bushes can yield up to 12 kg. Solitude is observed. Vigorous trees are resistant to -7-8 °C, lasting until April, and the duration of flowering was 15 days, while the beginning and end of this phase was observed in the Ranni spelliy variety between April 17-29, and the duration of flowering was 13 days. In the clementine variety, the flowering phase began on April 21 and ended on May 6, and it was observed that the duration of the flowering period was 16 days.

1-table Transition of phenological phases in varieties of introduced citrus plants (2023)

№	Citrus varieties	The beginning of the growth of buds	Beginning of the budding period	Flowering			The second growth period		
				Beginning	ending	Duration	Beginning	ending	Duration
Lemon									
1	Criterion	14.03	22.03	08.04	25.04	17	06.05	16.06	46
2	Grower in Uzbekistan	15.03	25.03	09.04	23.04	14	11.05	19.06	38
3	The first-born of Uzbekistan	16.03	26.04	11.04	28.04	18	10.05	15.06	35

In lemon cultivars, the beginning of the second growth stage lasted for 34 days, starting from May 15 to June 17, in Rannii spelled cultivar, and 23 days in Clementine cultivar, lasting from May 20 to June 11. did In the rest Kawano Vase, Ponkan, Chimera, the beginning of the second growth period started between May 16-18 and lasted until June 7-13, the duration of this phase was 26 days in Kawano Vase, 28 days in Ponkan, and 27 days in Chimera. it was observed that it constituted the day.

CONCLUSION

1. Selections were made for the purpose of creating new fast-ripening, fruitful, disease-resistant, high-quality selection materials suitable for the republic's soil and climate conditions using samples of the introduced lemon varieties "Clementine", "Kavano Vase", "Okitsu Vase", "Ponkan". .
2. As a result of all phenological observations in order to carry out selection processes in the lemon plant, it was observed that the beginning of the phenological phases in 3 lemon and 5 mandarin varieties was between March 14-20, and the beginning of flowering was from April 8 to April 24. The duration of flowering was 12 to 18 days. In varieties, the second growth period began on May 6 and lasted until June 20, the duration of this phase was 23-46 days.
3. Ripening of lemon fruits was noted in Kovano Vase and Chimera varieties from October 4-5, and in Ponkan fruits from November 4 at the latest. The duration of ripening in all studied lemon varieties was the same 33-34 days.
4. Introduced varieties and local varieties of lemon were separated according to valuable economic characteristics;
5. Among the mandarin varieties studied above, the highest yield was 75 s/ha in the Ponkan variety, while the lowest yield was 48.5 s/ha in the Klimintin variety.

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