

GROWING OF CITRUS PLANT SEEDLINGS

Muhamadaziz Faxrutdinov

Qishloq xujaligi fanlari falsafa doktori ,katta o'qituvchi

Dilnoza Raimova

Qarshi davlat universiteti

Agrokimyo va ekologiya kafedrası o'qituvchisi

ABSTRACT

Citrus fruit plants are propagated from seeds and vegetatively. In grafting and selection works, it is mainly propagated by planting seeds. Fruitful seedlings are grown vegetatively. All over the world, citrus plants are mainly propagated by vegetative (cutting).

Keywords: global, create, pure, identify, disease, productive, short, cost, cold, income, experiences, network, remedy, age, created, source, stem, medicine, yellow, niche, piece, branch, short, pubic roots, growing, root.

INTRODUCTION

Citrus fruit plants are propagated from seeds and vegetatively. In grafting and selection works, it is mainly propagated by planting seeds. Fruitful seedlings are grown vegetatively. All over the world, citrus plants are mainly propagated by vegetative (cutting). Vegetative method - it is said to restore the original mother plant from a piece taken from a somatic part of the mother plant. The seedling grown in this way fully preserves all the biological properties of the mother plant.

Not all types of citrus plants can adapt to vegetative reproduction. Some types of citrus plants (orange, tangerine, grapefruit) are propagated by grafting. The use of trifoliata (*Poncirus trifoliata*) as the main rootstock gives good results. The roots of trifoliata grow well in salty, sour and all other types of soil. It also easily combines with all types of citrus. All types of citrus plants grown in conjunction with trifoliata grow well and produce abundantly.

Plants propagated from seeds are inferior in terms of valuable economic characteristics (indicators) compared to the initial variety. In production conditions, citrus fruit seedlings are grown vegetatively - from cuttings or by grafting. Vegetatively grown seedlings come into harvest much earlier and retain the valuable characteristics of the main (parent) variety. For example, Meyer lemon seedlings grown from cuttings begin to bear fruit in the second or third year.

Research Work

It is possible to get a standard seedling in one year when propagating from cuttings, two years, sometimes three years when propagating by grafting. In the carbonate soils of Uzbekistan, Meyer lemon is a good rootstock for fruits.

Lemons are easy to grow from cuttings, oranges are difficult, and tangerines are even more difficult to root. It is best to propagate Meyer lemon from cuttings. In this case, the plants are not too big and the productivity is good. When the existing lemon varieties (Villa Franca, etc.)

are propagated from cuttings, the vegetative branches grow well, the yield is average, and the plants are often affected by gommosis. Therefore, they (lemon, orange and tangerine) should be propagated by bud grafting on appropriate grafts.

One- or two-year-old seedlings of Meyer lemons propagated from cuttings are good grafts for existing quality lemon varieties. Orange is propagated by bud grafting on seeds of bigaradia or other orange varieties. Meyer lemon seedlings grown from cuttings are also good grafts. Mandarin is usually propagated by bud grafting on various grafts. In Uzbekistan, mandarin varieties are grafted onto grafts grown from Meyer lemons.

Lemon and orange are grafts for grapefruit.

Currently, seedlings of Meyer lemon are considered the best grafts for growing citrus plants indoors in Uzbekistan. Plants grafted on Meyer lemon are characterized by slow growth, early harvest, fruit ripening two to three weeks earlier, and resistance to gommosis.



Propagation from cuttings is the regeneration of a plant from its vegetative parts (stem, root, bud or leaf). There are several methods of vegetative reproduction of fruit plants (trees, shrubs), as well as citrus plants on an industrial scale. This is also a green pencil method of reproduction.

One of the important aspects of growing plants from green cuttings is the presence of leaves that control the process of photosynthesis in the cuttings during their rooting, the presence of a reserve of meristem tissue in them, which is important in the formation of roots and branches, plays an important role in the formation of underground and above-ground parts of green cuttings. This method of propagation is based on the ability of plants to be completely regenerated from a part of it.

CONCLUSIONS

Citrus plants are propagated from cuttings in greenhouses. In Uzbekistan, cuttings can be obtained all year round, but spring (end of February, beginning of March) and early autumn (second half of August, beginning of September) are the best time to plant Meyer lemons from cuttings. When cutting in early spring (February-March), the maximum catch is 80-90%. When cuttings are made in the spring, the duration of cuttings in greenhouses is extremely short, and accordingly, the costs of growing seedlings are also reduced.

REFERENCES

1. Фахриддинов З. Обыкновенное чудо. Ташкент - 1974 г.
2. Десятиченко А.М. Перспективные сорта цитрусовых культур для защищенного грунта Узбекистана. Проблемы развития субтропического плодоводства в Узбекистане. Ташкент. Мехнат - 1985 г.
3. Фахриддинов.М. Лимончиликнинг ўзига хос синоатлари. Ташкент. 2014 й.
4. Фахрутдинов М.З. Жўраев С.Т. ситрус селекция ютуғи Ўзбекистонда. “Ўзбекистон қишлоқ ва сув хўжалиги” журнали. – Тошкент, 2022. – Махсус сон. – Б. 30-31.
5. Фахрутдинов М.З. Жўраев С.Т. Ўзбекистонда ситрус ўсимликлар селекцияси. *Jornal of Modern Philosophy Social Sciences and Humanities* (January, 2023). – Krakow, Poland, 2023. – Volume 14. – P. 133-140.
6. Faxrutdinov M.Z., Jo'raev S.T., Rajametova C.III. 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.
7. Juraev, S., Makhammatova, M., Jumashev, M., & Ashurov, M. (2023, March). Variability of main value-economic characteristics of F2-F4 hybrids of cotton in different soil-climate regions of Uzbekistan. In *IOP Conference Series: Earth and Environmental Science* (Vol. 1142, No. 1, p. 012092). IOP Publishing.
8. Juraev, S., Jumashev, M., Khudarganov, K., & Nazarov, K. (2023, March). Evaluation of qualitative parameters of fiber in cotton hybrids grown in various regions of Uzbekistan. In *IOP Conference Series: Earth and Environmental Science* (Vol. 1142, No. 1, p. 012084). IOP Publishing.