

ISSN: 2996-5306 (online) | ResearchBib (IF) = 9.674 IMPACT FACTOR Volume-3 | Issue-5 | 2025 Published: |30-05-2025 |

AGROTECHNOLOGY OF CULTIVATION AND CARE PLANTS LYCIUM BARBARUM

https://doi.org/10.5281/zenodo.15354172

Atamuratov Mukhammed Muratbay ugli Scientific supervisor: Baltaniyazov Jaqsibay Sarsenbaevich Karakalpak institute of Agriculture and Agrotechnologies

Abstract

Common birch is a bright red berry shrub widely used in folk medicine and has beneficial properties. It was used in medical practice in Tibet and was called «Tibetan Barberry». Growing dereza is not difficult and beneficial, and its fruits can be used for dietary nutrition and treatment of diseases. The plant is heat-loving, light-loving, and can grow in various soils. Despite the fact that tree care has its own peculiarities, it is resistant to cold and drought. When planting and growing plants, some rules should be kept in mind. Dereza fruits are widely used in agriculture and medicine.

Keywords

plant, cultivation technology, significance, bioecology, care.

Аннотация

Дереза обыкновенная - это ярко-красный ягодный кустарник, широко применяемый в народной медицине и обладающий полезными свойствами. Его использовали в лечебной практике в Тибете и называли «тибетским барбарисом». Выращивание дерезы несложно и полезно, а её плоды можно использовать для диетического питания и лечения заболеваний. Растение теплолюбивое, светолюбивое и может расти на различных почвах. Хотя уход за дерезой имеет свои особенности, она устойчива к холоду и засухе. При посадке и выращивании растения следует помнить о некоторых правилах. Плоды дерезы находят широкое применение в сельском хозяйстве и медицине.

Ключевые слова

растение, технология выращивания, значение, биоэкология, уход.

Lycium barbarum is a bright red berry that has gained popularity in folk medicine. The culture came to the East and was used in Tibetan healing practice. It was given the second name - the Tibetan zirki. Growing a dereza plant in the



ISSN: 2996-5306 (online) | ResearchBib (IF) = 9.674 IMPACT FACTOR Volume-3 | Issue-5 | 2025 Published: |30-05-2025 |

garden is considered interesting and profitable. The fruits obtained can be used in timely dieting and in the treatment of various diseases.

Planting and caring for the willow sapling is not difficult. The main thing is to choose a suitable type based on its characteristics. It is better to plant young shrubs in spring. If the seedling grows in a tubing, it is recommended to plant it throughout the warm season.

Lycium barbarum is a heat-loving and light-loving plant. Therefore, it should be planted in the clearest, sunny places. The plant is not demanding of soil acidity; adult goji can be grown in both slightly acidic and strongly alkaline soils. Seedlings are not demanding of soil fertility and have the ability to grow well even in poor soils.

The pit for planting vines needs to be prepared in advance. Its dimensions are 0.5 m wide and 0.5 m deep. The soil is fertilized with mineral fertilizers and compost. During planting, the seedlings are placed slightly deeper, and nutrient soil is sprinkled. The branches are necessarily fastened to supports. After the work is completed, the plants are thoroughly watered and mulched with humus. Despite the fact that the plant is not very demanding - resistant to drought, cold, and diseases, it is necessary to know some rules for growing grape berries on the plot.

For the lycium to develop fully, it is necessary to provide it with sufficient moisture. The soil under the crop should not dry up, but it is also necessary to prevent water stagnation in the root zone. This can lead to root rot, especially in cool weather. Young plants are more susceptible to incorrect irrigation regimes. With the arrival of autumn, covering the circumference of the stem with film gives better results.

The mineral and organic composition introduced into the planting hole is sufficient for the vegetation of the first year after planting. From the second year, supplemental feeding is carried out at least 2-3 times a year.

They are distributed according to the vegetation stage as follows:

- with the arrival of spring, nitrogen fertilizers are applied;
- by the budding stage, potassium-phosphorus feed is applied to the plants;
- after the end of the season, potassium compounds are applied to replenish the strength of the tree and increase its winter hardiness.

To avoid burning the roots, fertilizers are applied only to moist soil.

Lycium barbarum saplings have delicate, flexible branches. To prevent the fruits from touching the soil, their branches are tied to supports in the first years.



ISSN: 2996-5306 (online) | ResearchBib (IF) = 9.674 IMPACT FACTOR Volume-3 | Issue-5 | 2025 Published: |30-05-2025 |

Height reaches 2-5 meters, depending on the variety, when the branches are not cut. To increase yield and reduce the risk of plant disease, it is necessary to remove excess shoots.

Crops planted densely are more susceptible to fungal, bacterial, and viral diseases. It is recommended to cut off branches that have grown into the crown and dried branches.

The crown is formed from the strongest, healthy shoots. The new shoot is shortened to 4 buds per year, as fruiting occurs on older shoots. This contributes to the branching of shrubs and an increase in yield.

Lycium barbarum is distinguished by its frost resistance. It is recommended to bury the seedlings for 1-2 years after planting. Burial not only protects against sharp temperature fluctuations and cold winds, but also prevents damage to the branches under the weight of snow.

Growing and caring for the plant in open ground and at home presents no difficulties. The plant feels good in the garden, overwinters excellently, and does not require complex agricultural practices. The crop annually delights with the harvest of berries with beneficial properties. Drying them and using them as juice or jam has a very positive effect on health.

REFERENCES

- 1. Qayumov A., Boltaniyozov J. S. Dust-Holding Properties Of Wood And Shrub Species In The Conditions Of The Republic Of Karakalpakstan //The American Journal of Applied sciences. 2020. T. 2. №. 09. C. 170-174.
- 2. Джугалов X. Фенологични прояви при сортове годжи бери (Lycium barbarum L.) //Journal of Mountain Agriculture on the Balkans (JMAB). 2020. T. 23. №. 6.
- 3. Sherniyazov K., Atamuratova K., Baltaniyazov J. Types of vegetative propagation of ornamental tree-shrub plants in landscaping //International Bulletin of Applied Science and Technology. 2023. T. 3. №. 5. C. 1068-1070.
- 4. Dzhugalov H. Effect of the pruning on growth and productivity of two goji berry (Lycium barbarum L.) cultivars. 2020.
- 5. Kamalova N. B., Baltaniyazov J. S. ATROF-MUHITNI VA AVTOMOBIL YOʻL BOʻYLARINI KOʻKALAMZORLASHTIRISH USULLARI BILAN HIMOYA QILISH //SCIENTIFIC ASPECTS AND TRENDS IN THE FIELD OF SCIENTIFIC RESEARCH. 2024. T. 3. №. 27. C. 85-88.
- 6. Kamalova N. B., Baltaniyazov J. S. NUKUS SHAHRI AVTOMOBIL YOʻL BOʻYLARINI KOʻKALAMZORLASHTIRISH UCHUN DARAXT-BUTA



ISSN: 2996-5306 (online) | ResearchBib (IF) = 9.674 IMPACT FACTOR Volume-3 | Issue-5 | 2025 Published: |30-05-2025 |

TURLARINI TANLASH //SCIENTIFIC ASPECTS AND TRENDS IN THE FIELD OF SCIENTIFIC RESEARCH. – 2024. – T. 3. – №. 27. – C. 81-84.

- 7. Рузметов У. И. и др. НАВОИЙ ВИЛОЯТИ ШАРОИТИДА ДОРИВОР ГОДЖИ (LYCIUM BARBARUM) ЎСИМЛИГИ ХЎЛ ВА ҚУРУҚ МАССАСИГА МИНЕРАЛ ЎГИТЛАРНИНГ ТАЪСИРИ //Science and innovation. 2024. Т. 3. №. Special Issue 49. С. 545-549.
- 8. Джугалов X. Растежни и репродуктивни прояви на сортове от растението годжи бери (Lycium barbarum L.) формирано като дърво //Journal of Mountain Agriculture on the Balkans (JMAB). 2020. Т. 23. №. 6.
- 9. Baltaniyazov J. S., Kamalova N. B. Environmental and decorative properties linden leaved (Tilia cordata) under Karakalpakstan //СОВРЕМЕННОЕ ЭКОЛОГИЧЕСКОЕ СОСТОЯНИЕ ПРИРОДНОЙ СРЕДЫ И НАУЧНО-ПРАКТИЧЕСКИЕ АСПЕКТЫ РАЦИОНАЛЬНОГО ПРИРОДОПОЛЬЗОВАНИЯ. 2017. С. 820-821.
- 10. Мирзаева Ё. Я. и др. Шифобахшлик хусусияти бу̀йича дунёда энг ноёб мева берувчи Годжи Берри (Goji Berry) ўсимлигини тошкент вилояти шароитида ку̀пайтириш ва парваришлаш агротехникаси //TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIY JURNALI. 2021. Т. 1. №. 6. С. 264-270.
- 11. Қайимов А. Қ., Ҳамроев Х. Ф., Балтаниязов Ж. С. Қорақалпоғистон республикаси шароитида ку̂каламзорлаштириш учун танланған япроқбаргли дарахт турларининг у̂сиш ку̂рсаткичлари //Science and innovation. 2022. №. Special Issue. С. 208-212.
- 12. Baltaniyazov J. S., Kamalova N. B. Growing and cutting of dolls pharmacy //Научно-практические пути повышения экологической устойчивости и социально-экономическое обеспечение сельскохозяйственного производства. 2017. С. 607-608.