

## TECHNOLOGY OF GROWING GINGKO BILOBA SEEDLINGS IN OPEN AND CLOSED AREAS.

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**Abstract:** *The experience of introducing Ginkgo (Ginkgo biloba L.) species to Uzbekistan confirms that its cultivation for greening is a promising crop today. Studies have shown that ginkgo seeds consist of 2, rarely 3 fleshy carpels. For the cultivation of one-year ginkgo seedlings with closed roots, the height should not be lower than 16 cm, and the cell size should consist of containers of 25-40 cm<sup>3</sup>. Soil temperature +15-+180C is required for seed germination, +15-+220C for root growth.*

**Key words:** *Ginkgo biloba, relict, closed root seedling, peat, introduction, container, germination, seedling.*

**Access** Although not a conifer, Ginkgo biloba is a close relative of gymnosperms such as pine or juniper. All other species have disappeared over the years. To date, this species of Ginkgo biloba has been preserved since the Permian and Jurassic periods. Ginkgo grew 200-300 million years ago, when dinosaurs walked the earth. Ginkgo trees were widespread almost everywhere, but 2.5 million years ago only the last species remained. Now it grows in many botanical gardens around the world and is trying to save the population. Wild plants have been found in eastern China, but there is no clear record of their historical growth there. Ginkgo

(Ginkgo) ni-woody remains were found in China, and scientists called it a "living fossil". While the genus Ginkgo includes several fossils, its species and species have been identified, and only one modern species of ginkgo biloba (Ginkgo biloba L) has been preserved. Today, this plant is considered the oldest tree of the planet. Ginkgo biloba (Ginkgo biloba L) is a plant with an unusual decorative leaf in the form of a changed leaf shape. The interesting thing is that during the 300 million years that it was a woody tree, this plant has not changed much. Ginkgo biloba tree grows to a height of 40-45 m in places with good climatic conditions. One of the most important issues of beautification is to enrich the local assortment of the regions, not only by introduction, but also biological introduction of decorative plants, for this purpose, today, highly decorative plants in our republic consist of breeding tree species. Therefore, increase the high resistance of ginkgo plants to pollution, smoke and dust. Also, the role of beautification and landscaping organizations is invaluable in the organization of disease and pest tolerance and their promising new nurseries. The root system of this plant is promising when using planting material in indoor areas. The directions of artificial restoration of forests are connected with fundamental changes in agricultural technology. Planting material cultivation and forestry production technology will require significant changes.

**The main part.** Ginkgo (Ginkgo biloba) is the only current representative of the ginkgo family of open-seeded plants. The height of the tree is up to 40 m, the diameter is up to 1 m; young saplings resemble some deciduous trees, but gradually take on a poplar appearance. The leaves are banded, glove-like, with a groove in the middle, shed in autumn. Ginkgo is a dioecious plant, with male and female flowers clustered in smaller racemes. The seed looks like a round, grainy fruit. It grows wild only in some parts of China. It is cultivated in the south of the Crimea and on the Black Sea coast of the Caucasus.

**Research object and methodology.** In our conducted experiments, we learned: morphology, biology, seed reproduction, growing seedlings in ginkgo containers Ginkgo biloba L. Seedling observation (phenology, growth, development, etc.) was carried out in the arid and harsh continental climate of Uzbekistan. A

method generally adopted in botanical gardens. On the basis of the analysis of literary sources, its distribution and prospects in culture are considered. Ginkgo is cultivated in all regions of Uzbekistan. The objects of study were seeds and seedlings. Ginkgo biloba. Observations on the growth and development of seedlings during the vegetation period were carried out by the phenological method using biometric measurements. Observations phenological observations I.N. It was conducted according to the method of Beideman (1974).

In Central Asia, leaf and wood remains of Ginkgo have been found in Upper Permian and Triassic deposits. More than 15 types of Ginkgo grow in the area. Among them, 2 species were found to grow in South Uzbekistan, Tajikistan and Turkmenistan. Several species of ginkgo were found in Jurassic, Cretaceous and Tertiary strata in Northern Uzbekistan, Kazakhstan, Kyrgyzstan and almost all countries.

Doctoral students and researchers at the Research Institute of Forestry are working on the propagation of the rare Ginkgo biloba tree from seedlings in Uzbekistan, writes the press service of the State Forestry Committee. It is very important to monitor water and temperature when growing planting material in a greenhouse. It is done by absorbing moisture into the seed. The moisture content of seeds should be increased from 6 to 30-40%. Moisture and the seed most need the contact area, so after filling the greenhouse, the pallets will cause several abundant waterings to evenly moisten the entire layer of peat and maintain moisture for 4-6 days. need constant moisture). During the plant growth phase, reduce watering, ie. watered less.

Ginkgo biloba is resistant to drought, increasing humidity does not affect the number of seedlings of this plant. Cold tolerance climatic conditions and planting periods, the development of seedlings in greenhouse areas also showed its result in agricultural practices. Phosphorus, which is responsible for root formation, slows down in a dry substrate. If we increase the number of irrigations of ginkgo biloba than the annual norm, it washes away N, K nutrients.

Ginkgo is mainly propagated from seeds. Fertilization of ginkgo seeds is very high, only it should be planted in time, otherwise they quickly lose their fertility. Ginkgo fruits are picked in autumn, peeled and dried. Then it is stratified in moist sand in a warmer place for 2 months. When the seeds begin to germinate, they are planted in the soil, moistened and watered in time.

Sprouts are tender at first, it is necessary to protect it from cold and extreme heat. In the following years, its resistance to the effects of environmental factors increases and it begins to grow and develop freely. Roots can suffer from root rot, which is caused by a lack of oxygen. Complex mineral fertilizers are diluted in a separate plastic container.  $+15+18^{\circ}\text{C}$  is enough for seed germination, but at this time the roots have not yet developed. The optimum temperature for root growth should be  $+18+22^{\circ}\text{C}$ . If the optimal temperature is lower, the viscosity of water increases, moisture absorption stops. The optimal temperature for the growth of ginkgo seedlings should be  $+20+25^{\circ}\text{C}$ . If the temperature is higher than  $+30^{\circ}\text{C}$ , the growth of the plant slows down sharply. Greenhouse ventilation is essential to control temperature and relative humidity. The composition of the released carbon dioxide is consumed by the decomposition of peat and the night respiration of plants and seedlings. Taking into account the optimal stage of development, mineral supplements should be used when the plant's need for nutrients is the highest.

Seedlings grown indoors grow faster and more efficiently than seedlings grown outdoors. Because the temperature and humidity in the closed area are more favorable for plant growth than in the open area. Germination, stem height, leaf emergence and development of seedlings planted in indoor field were more effective than seedlings in open field. The ginkgo biloba tree is a unique and decorative tree that can be used for landscaping: roadsides, parks, residential areas, and recreational areas. Especially in the autumn, the leaves of the Ginkgo biloba tree turn golden and remain unshed for a long time, giving the streets a special beauty.

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