

## Care Of Some Species Of The Magnoliaceae Family

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**Abstract.** This article provides some information on planting and maintaining some species of magnolia species, which are ornamental trees and shrubs, belonging to the magnolia family, and ensuring continuity of growth and development. The technology of the correct application of agrotechnical measures in the effective cultivation of the large-flowered magnolia plant was highlighted. At the same time, scientific work was carried out to determine the effect of seed selection and stratification on seed fertility and to compare the fertility of large-flowered magnolia plants growing in different climatic conditions in laboratory and field conditions, and the research results were explained.

**Key words:** *M. Grandiflora*, *Magnolia denudata*, *M.stellata*, *M.liliflora*, *M.virginiana*, *M.acuminata*

Magnolias are ornamental plants. In areas where the climate and conditions allow growing magnolias, in particular, in our country, it is desirable to plant them on a larger scale than at present, in parks, avenues and roadsides. [2].

In our opinion, planting magnolias in parks individually or in small groups, rather than in mass, will give effective results. Because even in natural conditions, they do not form continuous massifs, but always grow mixed with other forest plants.

For example, *Magnolia denudata*, a type of magnolia that blooms at the same time (synchronized), thrives well when planted in parks on four sides (at least three sides) surrounded by tall evergreen trees and creates a spectacular display of white flowers. When planting them, it should be taken into account that when they reach adulthood, the distance between their crowns will not be less than 2-3 meters [3].

For best results, it is recommended to plant magnolias singly between green, not very tall bushes (for example, barberry - *Berberis brachypoda*, *V. Insignis*). When planted around magnolias, tall, evergreen trees, especially tall deciduous trees, make a magnificent crown of magnolias in bloom. It will be more pleasant if it is planted among the massif of evergreen bushes surrounded by green trees, on the banks of small water bodies.

Synchronous flowering and evergreen *M.* in large parks. wide avenues of *grandiflora* plants make a strong impression. *M.stellata* does well in small gardens and lawns in residential areas. When in bloom, this species is covered with an abundance of dazzling white flowers, reminiscent of a snowflake from afar. It's a pity that in our homes it is not customary to plant shrubs and trees in large pots for flowering in spring (January, February). However, in many Eastern countries, including China, the use of magnolia for this purpose has become a tradition 100 years ago.

Since magnolias bloom before leafing, it is not difficult to speed up their flowering. For example, species such as *M.denudata*, *M.stellata* often bloom at the end of January - February in the open ground when the winter is warm on the seashores of Ukraine, Kora. Or in Batumi in 1937-1938, it was recorded that *M.stellata* was in full bloom in mid-January due to the warm winter. *M.liliflora* is also a convenient object for winter flowering [7].

Flower buds of magnolias are formed in the autumn season of the previous year. This makes it easier to flower them from January to March, because the flower buds are formed in early spring. The plant uses enough sunlight in the open air. This helps them develop normal flower buds and, in turn, causes them to bloom in winter indoors. In order to flower in Kish, they should be kept in a cold (+3, -4°C), dark building from November to January. And in January, if they are moved to a warmer (+10°C) indoor place, they will bloom. Opened flowers should not be touched with water, otherwise they will spoil quickly.

As we mentioned above, it is advisable to use *M.denudata* and *M.stellata* species widely for winter flowering. As Tuvak specimens, these types of magnolias are very scenic when in bloom. It is advisable to grow magnolias that bloom in winter in subtropical regions of Uzbekistan (Kashkadarya, Surkhandarya), in places with moderate humidity, and distribute them to other places. For example, Fabbri supplies winter-

blooming plants in Europe to the Netherlands and Belgium.

Among the other members of the magnolia family, the tulip tree deserves the attention of gardeners. This tree can form large groups, in particular, it is used to create alleys in large parks and to plant along the streets. The tulip tree grows quickly and has a healthy appearance due to its large size. The width of alleys and the distance between trees should not be less than 13-20 meters.

Medicinal magnolia plants. In European medicine and pharmacology (a guide or set of rules for the preparation, storage, and prescribing of medicine to patients), magnolias are not used as medicinal plants at all, and people have almost no understanding of their medicinal properties. But in countries where they grow naturally, tincture (dissolved in alcohol, ether) of some magnolias is used in folk medicine [5].

Our introduced magnolias have tonic properties. For example, despite the fact that they are located far from each other, the medicinal properties of this plant have been known in China and the United States for a long time and have been used in the treatment of certain diseases. In our opinion, this case shows that the existence of substances affecting some diseases in magnolias was known before in both countries, which are located far from each other.

Medicinal substances are found in the roots, bark, flowers, leaves, fruits and seeds of magnolias.

A decoction of the bark of *M.grandiflora* is used in North America as an aphrodisiac and a good antimalarial. Tincture of bark, fruit and seeds of *M.virginiana* is also a substance that gives good results against malaria, that's why this plant is popularly called "Virginia henna", that is, a medicine for malaria. In addition to being an antimalarial, it has tonic properties and improves heart function, and is also considered a powerful remedy for chronic rheumatism. A decoction of *M.denudata* seeds is used in China to treat heart and lung diseases. A decoction of the bark of *M.grandiflora* was analyzed as early as the 19th century and found to contain a crystallizing substance analogous to liriiodendrin found in the tulip tree and the root of A decoction of the bark of *M. virginiana*. *Liriodendron tulipifera* is used in North America as an anthelmintic, antimalarial, and medicinal agent. In addition, it is used for gout, rheumatism, dysentery, itching and hysteria. A tincture of the root of this tree has a rapid effect. Crushed *Liriodendron* leaves are applied to the forehead in case of headache [6].

Breeding magnolias. Magnolia can be propagated both from seeds and vegetatively. Can be propagated from seed.

Magnolia seeds usually ripen in September, October. At this time, the formed "cubes" - fruits are opened lengthwise from the waist and the seeds come out. They hang along the surface of the "dome" in thin threads - funicles. It is at this time that the seeds should be collected and stored in slightly moist sand until March, before planting. If this is not done, the oily endosperm of the seed starts to ferment quickly and loses its fertility. Before planting, the blackened and partially damaged (rotted) seed coat is separated by rubbing with sand, and the cleaned black hard seeds are washed. planted in flat boxes and placed in a greenhouse with a temperature of 15-18°C. When the third leaf of the grass is produced, it is planted in a ditch in well-drained soil. In our conditions, they do not require winter protection [4].

Tulip tree seeds are sown directly into fertilized soil as soon as they are ripe (around November). It should not be forgotten that the seeds of the tulip tree have extremely low fertility, the fertility usually does not exceed 5-6%. sometimes it can be up to 16%.

Vegetative reproduction of magnolias is extremely difficult, so this method can only be used if the plant does not produce seeds or if it is not possible to obtain seeds from another place. Propagation of magnolia species from cuttings in most cases does not give satisfactory results. However, *M.grandiflora* can be propagated from woody cuttings.

Multiplication with Parhesh yuli (desired) gives good results. It takes a long time (two years) to get Beijing root specimens. The method of propagation by parkhesh is no different from the method of propagation of other plants by parkhesh.

The grafting method gives better and faster results than propagation by grafting. In this method, *M. liliflora* and *M. tripetala* with khazonrez are used as grafts. The root system of the last type is relatively shallow-rooted and develops normally when transplanted to another place.

*M. grandiflora* is taken as a graft for evergreen species. In the greenhouse, at the end of February, grafting is done on the cuttings planted in pots. The thickness of the weld during welding should be 8-10 mm. It gives a good result when welding is carried out by copulation method. After welding, it is necessary to apply

boiling glue used in horticulture. The grafted plants are planted in the nursery after the scion and scion grow together and are cared for like subtropical plants. After the plant has a height of 60-70 cm, they are planted in a place of permanent growth. Transfer to permanent growing areas. Above, we said about the best places to plant magnolias in parks. It should be emphasized that for planting magnolias it is necessary to choose places protected from the wind. Because the wind blows their flowers in a short time, making them very invisible.

Magnolias do not like dry soil. For North American magnolia species - *M.virginiana* and *M.acuminata* - sites with significantly moist (but not swampy) soil are preferred. Places where water collects (stands) are not suitable for magnolias. In addition, carbonate and saline soils are not suitable [9].

Transplanting magnolias and moving them from one place to another is definitely done in the spring, that is, when the signs of budding appear. Caring for magnolias is no different from caring for other subtropical trees. Of the above species, *M.grandiflora*, *M.Kobus*, *M.denudata* and *M.stellata* do not require winter protection.

One of the magnolia species – *Liriodendron tulipifera* or tulip tree - can be used in the creation of artificial forests. Its wood is very valuable, grows upright and straight. The body is columnar and grows quickly. These characteristics show that it is suitable for creating artificial forests in our subtropics. In the creation of such forests, *Liriodendron* grass seeds are sown in the spring of the third year after planting, that is, before the beginning of growth. The distance should be 2 meters on each side. Then, as they grow in height and width, some careful thinning is necessary. Their care consists in cleaning them from weeds and other tree pests. Such care is continued until the height of the trees reaches 7-8 meters and their crowns are connected to each other.

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