



## Morpho-Biological Properties Of Hibiscus Syriacus L. And Hibiscus Hybrid

Allaberdiev R.X.

National University Of Uzbekistan Jizzakh State Pedagogical Institute National University Of Uzbekistan

Raximova M.

National University Of Uzbekistan Jizzakh State Pedagogical Institute National University Of Uzbekistan

Esov R.A.

National University Of Uzbekistan Jizzakh State Pedagogical Institute National University Of Uzbekistan

### ABSTRACT

In the next period of advanced science and technology, the situation requires attention to improving the ecological situation, managing the balance of nature, creating a favorable ecological environment for the population, improving the climate of large cities and so on.

### KEYWORDS

HIBISCUS HYBRID Rusanov Flora

### INTRODUCTION

In the next period of advanced science and technology, the situation requires attention to improving the ecological situation, managing the balance of nature, creating a favorable ecological environment for the population, improving the climate of large cities and so on. On the basis of the instructions of paragraph 3 of the minutes of the meeting of the Cabinet of Ministers "On measures to accelerate the reconstruction of the city of Urgench 01-05 / 1-833" The need to increase the number of ornamental plants "Hibiscus" in the landscaping of the city of Urgench, Khorezm region, was noted by the leadership of our government.

There are currently about 200 forms and varieties of hibiscus. Hibiscus began to grow in the botanical gardens of European countries in the early XVIII century. Hibiscus (Hibiscus) is a plant belonging to the family Hibiscus, which grows mainly in tropical regions of Southeast Asia. Hibiscus is a shrub or small tree up to 3 m tall. It covers about 300 species.

Institute of Flora and Fauna gene pool of the Academy of Sciences of the Republic of Uzbekistan named after F.N. Rusanov, Hibiscus has been grown as an ornamental plant since 1940.

Object of research: *Hibiscus syriacus* L. and *Hibiscus hybrida* species of the family Malvaceae.

*H. syriacus* L. (Syrian hibiscus) is native to China, India. A deciduous shrub with light green leaves and flowers of different colors. In landscaping it is possible to grow it individually and in groups, to build green walls or alleys. Syrian hibiscus grows slowly, begins to bloom in 3-4 years. Lives up to 100 years. With age, it becomes more resistant to cold and can withstand temperatures down to -22°C. Syrian hibiscus grows well in moderate humidity (does not like calcareous soil), resistant to transplanting and pruning. In early spring the old and old branches are cut, the very long branches are shortened. Syrian hibiscus grows well from cuttings, grafting and seeds. Widely used in landscaping in Uzbekistan.

*Hibiscus hybrida* or (Cotton flower) was developed in the 40-50s of the last century by the well-known breeder F.N. Rusanov. A perennial ornamental plant. Demands heat and humidity. Hibiscus flowers are large, long-blooming. Very attractive flowers - simple, large, up to 15–20 cm in diameter. *Hibiscus hybrida* flowers vary in color and size. The flowers are white, white-yellow, rose-colored, red, pink, nastarin (siren), purple varieties. *Hibiscus hybrida* is characterized by landscape, rapid growth, adaptability to different climates. *Hibiscus hybrida* is one of the perennial plants that blooms for a long time in warm regions and blooms from the first decade of June until frost. *Hibiscus hybrida* is less demanding to soil.

But it grows well in well-drained soils. *Hibiscus hybrida* is resistant to gas and smoke and can be used in urban landscaping. *Hibiscus hybrida* seeds retain their viability for 3-4 years and require a temperature of 20-24°C for the seeds to germinate. Seeds germinate 9-12 days after sowing. *Hibiscus hybrida* is shade tolerant, but in the absence of light

development slows down and blooms less. Relatively drought tolerant, grows and thrives well in open, sunny areas. In winter, the above-ground branches of hibiscus dry out. Strong roots overwinter in the soil — new shoots sprout forth the following year.

At present, a *H. hybrid* nursery has been established in the Botanical Garden, the seeds of which ripen in late August and early September and are harvested at this time. Hibiscus seeds are sown in spring (March-April). Seeds are not stratified before sowing, they are sown directly. The sown seeds are finely sprinkled with 0.5 cm of sand in spring and 1.0 cm in autumn. wood chips on top of the sand, covered with manure. When the top of the seed is covered with sand, etc., the thickness should not exceed 1.5-2.0 cm. Then lightly watered with a watering can. Seeds are easy to germinate and can be stored for 3-4 years. 1 pog. per meter is sown 4–5 g of seeds, it is not necessary to shade the seedlings.

Hibiscus is also easily propagated vegetatively, i.e. by cuttings, rootstocks and grafting. In autumn, hybrid hibiscus bodies are cut, leaving 8-10 cm from the ground, and covered with soil, humus or sawdust, and in spring the bottom is opened. Hybrids of hybrids are propagated by planting, separating the branches from the bushes (in the spring the buds swell). Propagated by green cuttings in spring and early summer.

Hybrid varieties of hibiscus are propagated vegetatively, that is, by division of the bush, by pruning and grafting. In the first case, the cultivation of hibiscus begins with this - in the spring in late April is dug up an adult bush (with twigs), from which the soil is removed, divided into several parts. It is necessary to have roots and growth point in the allotted part. Divided plant branches are planted.

Cuttings should be prepared in early spring before the arrival of hot days. Usually the branches close to the root collar are cut or

separated from it by the heel. The separated area should be cleaned with a knife. Cuttings prepared in this way should be 10-15 cm long and 6-8 mm in diameter. Planted cuttings are sprayed with water 3-4 times a day, and the plant is rooted for 3-4 weeks.

In summer, hibiscus is well watered, softened when the top layer of soil dries, fed regularly. From time to time it is necessary to spray the surface of the hibiscus to remove dust. Protected from diseases and pests. After watering, the soil is loosened. In autumn, watering is reduced.

They can grow in one place for several years. Hibiscus is a perennial shrub that is drought tolerant, but this negatively affects their flowering. If the plant is not watered enough, it may lose some of its flower buds. Therefore, hibiscus needs special care during the scorching heat of the year. It should be watered once or twice a week (the more it is watered, the better). Irrigated areas are sprinkled with peat humus or straw. Even though his body is strong, he needs to be tied up.

Hibiscus is fed with complete mineral fertilizers. It is considered to be well fertilized even if it is watered from time to time by mixing manure (juice) with water. Hibiscus is fed once a week from spring to mid-August, the rest is fed half a dose of phosphorus and potassium once a month.

With the onset of cold, hybrid hibiscus bodies are cut, leaving 8-10 cm above the ground, and covered with wood or rice chips, dry peat humus or manure. Hibiscus grows well and blooms for a long time when properly and regularly cared for.

Thus, the results obtained on the basis of many years of scientific experience of scientific institutions of the republic in the cultivation and propagation of hibiscus flowers are reflected.

## REFERENCES

1. Kurbanova, D. A. (2016). ANCIENT PEARLS IN GREAT WORLD MUSEUMS WHICH BELONG TO THE HISTORY OF UZBEKISTAN AND LEARNING THEM. Социосфера, (3), 55-61.
2. Mukhamajanovich, S. S., Gayratovna, S. S., & Ravshanovich, G. M. (2020). The use of the mountain kars in the tourism sphere in cort and recreation zone of Chimgan-Charvak. Journal of Critical Reviews, 7(3), 475-481.
3. Alibekov L, Alibekova S, Hazarov I, Gudalov M. About some regularities of degradation geosystems in Central Asia. Tatranka Javorina, Slovakia, 2012, Vol 21, № -1, 42-44 r
4. Gudalov M. Foundation of Aydar-Arnasay lakes system and their effects on the environmental landscape. Nature and Science. Volume 17, Number 11 November 25, 2019 USA New York.
5. Gudalov M., Zikirov B. Metnods of studying the landscapes around the Aydar-Arnasay lake system. International engineering journal for research & development. Vol - 5, Issue - 7, 2020 India.
6. Gudalov M., Zikirov B., Imamova D. Predicting changes in landscares around the Aydar-Arnasay lake system. Accerted in the journal The American of Engineering and Technology. Volume - 02, Issue - 10, October 2020.
7. Gudalov M., Gozieva M. Ways to develor modern ecoturism in the Zamin basin. International engineering journal for research & development. Vol - 5, Issue - 7, 2020 India.
8. Sharipov Sh, Gudalov M, Shomurodova Sh. Geolologic situation in the Aydar-Arnasay colony and its atropny. Journal of Critical Reviews. Volume 7, Issue 3, 2020 Malaysia Kuala Lumpur.
9. Sharipov Sh, Shomurodova Sh, Gudalov M. The use of the mountain in the tourism sphere in cort and recreation zone of Chimgan-Charvak. Journal of

Critical Reviews. Volume 7, Issue 3, 2020  
Malaysia Kuala Lumpur.

10. Kurbanova, D. (2020). Tent Of The Emir Of Bukhara (Second Half Of The 19th Century)(History Of One Exhibit From The Collection Of The State Hermitage). The American Journal of Social Science and Education Innovations, 2 ;(12), 180-183.