

**YAPON SOFORASINING TUZULISHI VA EKOFIZIOLOGIK  
XUSUSIYATLARI  
STRUCTURE AND ECOPHYSIOLOGICAL CHARACTERISTICS OF  
JAPANESE SOPHORA  
СТРУКТУРА И ЭКОФИЗИОЛОГИЧЕСКАЯ ХАРАКТЕРИСТИКА  
СОФОРЫ ЯПОНСКОЙ**

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**Annotatsiya:** *Yapon soforasi (Sorhoga japonica) daraxtining vizual go'zalligi uni bog'ni obodonlashtirishda ishlatish uchun juda jozibali qiladi. Uning mashhurligini belgilaydigan Sophoraning asosiy xususiyati - inflorescences va mevalarning shifobaxshligi.*

**Аннотация:** *Визуальная красота дерева софоры японской (Sorhoga japonica) делает его очень привлекательным для использования в ландшафтном дизайне. Главная особенность софоры, определяющая ее популярность, – целебные свойства соцветий и плодов.*

**Abstract:** *The visual beauty of the Japanese sophora (Sorhoga japonica) tree makes it very attractive for use in landscaping. The main feature of Sophora, which determines its popularity, is the healing properties.*

**Kalit so'zlar:** *Safora, daraxt, unuvchanlik, gullash davri, meva, urug.*

**Key words:** *safora, tree, fertility, flowering period, fruit, seed.*

**Ключевые слова:** *сафора, дерево, плодородие, период цветения, плод, семя.*

Japanese saphora (*Sophora japonica* or *Styphnolobium japonicum*). Japanese sophora (*Sorhoga japonica*). It is a very beautiful tree with a height of 10-20 m, spreading branches. In old age, the bark is cracked along the length and turns dark, the bark of the branches and branches is smooth and dark green, and there are lentils[1]. The leaves are located on the branches of the variety bat, have an odd feather-like structure, and consist of 7-17 egg-shaped leaves. Sofora blooms from June to August, the flowers are white-yellow, butterfly-shaped, and form a small furrow at the end of the stem. It is a plant that produces nectar. The pods are harvested in October, hang on the tree, have a smooth surface, and do not split into pods. It is filled with a sticky liquid, which is green at first and then dark red in color. The seed is black and looks like a bean. If it is sown in spring, it will germinate after 10-15 days. The axis and lateral roots develop vigorously and turn blue from the tip.

The species *Sophora japonica* belongs to the legume family, genus *Styphnolobius*. Currently, this plant can be found in scientific literature under the name *Styphnolobium japonicum*. Although the name has a Japanese epithet, this plant comes from China. It is one of the official trees of Beijing. It is planted near the graves of Buddhist monks, although in Chinese folklore the tree usually has a negative connotation.

## MODERN EDUCATIONAL SYSTEM AND INNOVATIVE TEACHING SOLUTIONS

*Sophora japonica* is a large and slow-growing tree that can reach up to 25 meters in height. The trunk of an adult tree is covered with dark gray bark, young shoots are bright green. Crown leaves are formed from 9-12 oblong leaves (2-5 centimeters long) located in pairs along the petiole. The length of the petiole reaches 10-25 centimeters, depending on the age of the tree. At night, the leaves are rolled into a tube, flattened under the sun's rays, reach the sun. A wide crown of light green color creates a soft shade and coolness in the hot season.[2]

Rutin, which has the properties of vitamin P, has been found in the flowers of the plant. This substance reduces the fragility of capillaries, so it is indispensable in the treatment of diabetes, typhoid and measles. Doctors in some countries of South-East Asia claim that the specially prepared flowers of the plant can prevent stroke, because the substances in them effectively strengthen the walls of blood vessels and lower blood pressure[3].

In *Sophora japonica* (Japanese sophora), vegetation starts from the end of February to the beginning of March. It was observed that the formation of leaves of *Sophora japonica* started from the 2nd decade of March and continued until the 2nd decade of May. The formation of reproductive organs begins in the second decade of July and continues until the middle of August. Fruiting begins in June and lasts until the 3rd decade of August. It can be observed that the ripening of fruits continued from the 2nd decade of September to the 2nd decade of October. The fruits remain on the tree all winter. The shedding of leaves continues from the 3rd decade of October to the end of November. After that, a period of silence begins.

The wood of safora is hearty and hard. Yellow dye is obtained from its fruit. This tree grows naturally in Japan and China[4].

It was brought to the CIS 150 years ago. It is a light-loving plant, it is not picky about the soil, it grows even in wet soil, it is resistant to drought. Sofora is one of the most beautiful trees. Because it blooms beautifully. It is resistant to dry summer heat and drought in the conditions of Tashkent city. It is a promising species in landscape construction. It is recommended to be widely used in greening of residential areas. (Appendix Figure 3).

The visual beauty of the *Sophora japonica* tree makes it very attractive for use in landscaping. The main feature of *Sophora* that determines its popularity is the medicinal properties of inflorescences and fruits. They are widely used for the production of medicinal infusions in traditional folk medicine[5].



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