

## PHARMACOLOGICAL PROPERTIES OF EPHEDRA DISTACHYA PLANT

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Annotation: Medicinal plants are plants used to treat and prevent various diseases. Currently, the demand for herbal medicines is increasing significantly. Medicinal plants are found in all regions of our republic, including desert, valley, mountain and mountain zones. They are well adapted to the soil and climate conditions of the areas where they are distributed, and among them there are many types and forms resistant to drought, heat, soil salinity and other stress factors.

Key words: Ephedra distachya, medicinal plants, chemical composition, distribution, useful properties, seed, fruit, flower, podlog, root.

One such medicinal plant is the ephedra plant, and we will provide information about its medicinal properties in this article. The plant belongs to the Ephedraceae family and belongs to the genus Ephedra. More than 40 species of this genus are distributed around the world (especially in Eurasia and America), 10 species grow in Uzbekistan. Ephedra plant is a typical representative of this family. Widespread in deserts and deserts of the Mediterranean floristic region, particularly in South Asia, North and South America, India and China [1]

The local name of the ephedra plant is qizil ildiz or qizilcha [2]. Ephedra equisetina (Ephedra equisetina) is an evergreen shrub belonging to the Ephedra family (Ephedraceae), Ephedra family. Its height reaches 1-1.5 meters. A dioecious plant with opposite or alternate leaves on the stem. It grows in the mountainous regions of Central Asia [3]. Its raw material contains a total of 0.6-3% alkaloids.



90% of them are ephedrine. Ephedrine hydrochloride (0.025 g) in tablet form is used for dyspnea and hypertension [4].

Ephedra is of great importance in the national economy. In particular, *E. equisetina*, *E. intermedia* species are used to prepare anti-asthma drugs [1].



Figure 1: General view and fruit of Ephedra

Ephedra has been used in Chinese Medicine (TCM) for over 5,000 years. First of all, this is a plant used for asthma, bronchitis and hay fever. Ephedra is also used to treat cold flu symptoms, including cough, fever, and chills. Although this plant is a natural plant, its main active ingredient is ephedrine, which can be synthesized as a medicine. Ephedrine alkaloids from this herb have sedative properties.

How to take it: Ephedra should only be used on a short-term basis, as long-term use can cause addiction. The amount of time that is considered safe is unclear. Ephedra should only be used under the guidance and supervision of a properly trained professional. Ephedra should be taken without food, between meals.

The American Botanical Council warns that anyone under the age of 18 should not use ephedra without strict medical supervision. Ephedra medicine can be in dry or liquid form. It can be taken as a pill, capsule or tea.



Ephedra can cause side effects such as nervousness, restlessness, anxiety, insomnia, headache, nausea, vomiting, and urinary problems. More serious side effects include high blood pressure, fast or irregular heartbeat, stroke, seizures, addiction, and even death. If you experience any of these side effects, stop using Ephedra and contact your provider immediately. You should not take Ephedra if you have the following health conditions: anxiety, depression, high blood pressure, glaucoma, heart disease, enlarged prostate, difficulty urinating, seizure disorders, cerebral circulation disorders, psychiatric disorders, thyroid gland diseases or diabetes. Anyone taking medication for high blood pressure or depression, pregnant or breastfeeding women, should avoid ephedra and ephedra alkaloids such as ephedrine. You should consult your doctor to determine if ephedra is safe and appropriate for you.

### CONCLUSION

In this article, we have provided a brief overview of Ephedra. This plant is a very useful plant. Ephedra should only be used for short periods of time, as long-term use can cause addiction. The time considered safe is not clear. Therefore, when we use these and other medicinal plants, we must use them with the permission of the doctor. We should use these and similar plants wisely.

### REFERENCES

1. Пратов У., Жумаев Қ. «Юксак ўсимликлар систематикаси» Тошкент-2003.
2. Eshmuratov R.A., Ajiev A.B. Qoraqalpog'iston dorivor ósimliklari. Toshkent «Tafakkur avlodi» 2020.
3. Мустафаев С. М. «Ботаника (анатомия, морфология, систематика)» Тошкент Ўзбекистон 2002.
4. Бахиев А., Өтениязов Қ., Темирбеков О. «Ботаникалық ресурстаның». оқыу қолланбасы. Ноқис.



5. <https://www.altzapovednik.ru/info/publikacii/zametki-dendrologa/efedra.aspx>
6. <https://www.botanichka.ru/article/efedra/>