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## TO STUDY THE GROWTH AND DEVELOPMENT OF THE SUMBUL KOVRAK (FERULA SUMBUL)

**Abstract:** The subject is mainly the growth of the sumbul kovrak, its beneficial properties. Types of development and methods of use of sumbul kovrak plant are shown. In addition, the chemical composition and drugs, positive and negative effects on the human body are given.

**Key words:** Sumbul kovrak, vitamin, organism, nature, resin, emulsion.

**Language:** English

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### Introduction

During one of his visits to Surkhandarya region, President Shavkat Mirziyoyev proposed to establish an association of fragile breeders. In fact, given the natural prevalence of brittle medicinal plants in our country and the possibility of additional artificial propagation, they envisioned far-reaching plans. According to the order, a lot of work has been done to expand the area of fragile medicinal plants, to establish plantations and to develop their processing.

At first glance, the rugged plant looks like a useless, wild plant. We all met him on the road, in the desert. But not all of us know its healing properties. The beneficial properties of kovrak have been known to us for a long time, and the literature of our scholars, such as Abu Ali ibn Sina and Beruni, recommended the use of medicines and dietary preparations made from it in the treatment of various diseases. The Ferula family is a plant belonging to the genus Ferula, which has more than 170 species on Earth. There are more than 110 species in Central Asia and 50 in our country. There are basically 10 types used to make resin-glue. These are the ugly rugs, the mountain rugs, and so on.

These species are very similar in appearance and morphology, but in nature, foul fractures (Ferula assa-foetida) are common, and the resin is mainly derived from this species.

**Kovrak species** grow in the sandy deserts, hills, mountains and foothills of the republic, on clean soils. Its species, which grow in Surkhandarya, Kashkadarya, Samarkand, Jizzakh, Navoi, Bukhara regions and the Republic of Karakalpakstan, are highly medicinal. Fragile is also common in Kazakhstan, Tajikistan, Iran, Afghanistan, Pakistan and India. In our region, this plant blooms in March-April, and the fruits ripen in April-May. The plant is perennial, the aboveground parts live for 1.5-2 months, depending on the growing environment and weather conditions. The stems are 1.5-2 meters long, the roots are 15-20 cm thick, and the beets are deep. In the spring, the locals prepare green soms and healthy food from the immature roots. This, in turn, is a great benefit to the human body.

**It is usually used** in the form of juice, powder, tincture, emulsion and tablets made from the roots, leaves, bark, flowers, fruits and other parts. The resin-

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juice, which is mainly obtained from the glue-root, is widely used in medicine. It is widely used in medicine for its medicinal properties. In addition to cleansing the gastrointestinal tract of toxins and vomit, it is very useful in the treatment of other diseases. Examples include angina, bronchitis, and other respiratory illnesses. The solution has antiseptic and analgesic properties for rinsing the mouth, cleanses the respiratory tract of germs and eliminates bad breath, and in small amounts can be used to treat hoarseness. It can be used to effectively treat the early stages of cataracts in eye diseases, and to reduce the toxic effects of venomous insect bites. Kidney stones, psoriasis, eczema, skin cleansing, liver cleansing and treatment of diseases are mentioned in the literature of Ibn Sina.

It is known to be very effective in the treatment of disorders of the nervous system and epilepsy, has excellent results in toothache, muscle aches, arthritis, osteochondrosis. In Eastern medicine it is used in the treatment of mastopathy, infertility, impotence. In modern medicine, a number of oncological diseases, uterine fibroids, prostate adenoma are reported to have positive results. Kovrak plant is a medicinal plant that treats other diseases such as varicose veins, pulmonary tuberculosis, plague, ulcers, whooping cough, as well as a means of strengthening the person, restoring energy balance and tone. Another important aspect is that in the spring, when the meat is cut, it replaces various useful vitamins and microelements, cleanses the body of accumulated harmful slags and toxins, and gives mental freshness. That is why experienced doctors considered kovrak to be superior to life-giving ginseng. In addition, from the countries of the East in Iran, Pakistan, India and Afghanistan, brittle glue and its root are used as a spice in cooking, in the manufacture of perfumes in the cosmetics industry.

As mentioned above, 10 types are mainly used to obtain resin-glue, which are filthy flakes, rova, kuhiston flakes and other names. In nature, foul-smelling flakes (*Ferula assa-foetida*) are widespread, and the resin-glue produced in our country and delivered to consumers is mainly of this type and is used as a remedy for various diseases. The stem grows and flowers once every 8-9 years - monocarp. Stems erect, thick, hollow, branched at the top. The rhizome leaves are banded, separated three times. The leaves are oblong or lanceolate. The leaves on the stem are small, covered with a lot of hairs on the outside, and the stems are arranged in rows. The flowers are arranged in a complex umbrella. The flower is pale yellow, without a cup, petals 5, paternal 5, maternal node two-chambered, located below. The fruit is a two-piece piece. The composition of the glue-resin used in medicine consists of essential oils, organic sulfides, pinene, coumarins and other compounds that give it the smell of garlic.

Kovrak glue is used in folk medicine for the treatment of varicose veins, pulmonary tuberculosis, plague, ulcers, whooping cough, toothache, nervous and other diseases, as well as as a stimulant, expectorant. used as a decongestant and worm-driving drug.

Dangerous swellings and wounds are treated by crushing the very young branches of the bark and squeezing them into yogurt. Alcohol tincture (tincture), emulsion and pill are used in asthma, stroke and nervous diseases. In scientific medicine, brittle gum is used as a powder, emulsion and tincture under the name "assa foyetida" as a painkiller and sedative, and is included in the pharmacopoeia of many countries. From the East, in Iran, Pakistan, India and Afghanistan, brittle glue and its root are used as a spice in cooking and in the manufacture of perfumes in the cosmetics industry. The production of tar from the root of kovrak lasts from early spring to autumn, so the period of resin extraction is divided into spring and summer. The spring stage is the preparation period, during which the area for the resin is determined, the total stock of the resin is determined, and the plants for the resin are determined. Kovrak, as mentioned above, is a monocarp plant, so it does not have a stem in all the bushes, so it is necessary to clean the roots of the plant from the stems and surface leaves and prepare them for resin. To do this, dig around the root of the fracture to a depth of 5–10 cm and a width of 20–25 cm, and the upper part of the root is opened. After opening the upper part of the rhizome root, it is cut to get the glue-resin, after 5-6 days the quality glue-resin "Donak" juice is collected, and the collected glue-resin is collected. pruned, then again cut from a new place, during the season, depending on the size of the plant root can be cut 15–20 times. At the end of the resin harvesting season, each bush should be covered with soil to prevent the plant from drying out in the future. It flowers in March-April and ripens in April-May. The above-ground parts of the plant live for 1.5-2 months, depending on the growing environment and weather conditions.

**In our country**, the production of brittle glue officially began in 2006. In addition to the state forestry, there are farms and some private entrepreneurs. It should be noted that in order to obtain resin glue from the fracture, it is first necessary to identify the natural biological and operational reserves of the fracture, create a large-scale map and allow the plant to regenerate naturally without damaging the environment. In, it is necessary to carry out the preparation of glue-resin in turn. The following rules should be followed when preparing the glue:

- It is recommended to take the glue from a mature adult plant;
- It is forbidden to take glue from biologically immature 2-3-year-old plants;
- Three out of 5 mature plants per 10 m<sup>2</sup> can be glued;

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- Do not allow the preparation of glue-resin from flowering plants during the preparation period;

-In order to get seeds for the propagation of chestnut plants in the coming years, it is advisable to leave 2-3 flowering and seed-bearing plants in each area of 400-500 m<sup>2</sup>.

One of the best ways to prevent the depletion of fragile natural resources is to plant and reproduce them under natural conditions. To do this, it is recommended to prepare the seeds ripened in the summer, dig the cleaned seeds in the autumn in the area of natural growths, dig 5-10 cm holes, plant 3-5 seeds in each hole and cover with soil. This recommendation is recommended for forestry workers, farmers, and private entrepreneurs based on the biological properties of the fragile plant, as fragile, multiplies from seeds grown naturally and grows over a wide area.

In the future, one of the main tasks of our science is to study the bio-ecological properties of kovrak in the natural environment and to solve the problem of their cultural reproduction.

**It is widely used** in cooking in China, India and other Asian countries. The powder from the crumbly resin glue is added to the dish as a spice and as a substitute for onions and garlic. There is a popular saying in India that if you add crumbs, the stomach will digest the nails as well, because it enhances digestion. It is a must-have when cooking difficult-to-digest foods. Resting your appetite can help you relax and lose your appetite. Due to the healing properties of the plant, it is in great demand in the pharmaceutical industry, and its demand for it in the world market remains high. Therefore, due to the favorable climatic conditions for the cultivation of kovrak in our region, due to low-cost crops, it is especially important to establish plantations and further expand the existing ones. It is also important to preserve the brittleness that grows in natural areas and to prevent any actions that could lead to its extinction. Most importantly, brittle cultivation and processing is profitable, and its development and creation of new jobs will have a positive impact on our economy.

### Chemical composition of the product.

In medicine, the root and root glue-resin are used. Glue-resin from the roots (dried milk juice) -

"Assa-foyetida" contains resins, glue, essential oil and other compounds (umbelliferon coumarin, ferula acid and its esters formed with resin alcohols). Glue-resin essential oil contains organic sulfides, pinene, coumarins and other compounds that give the plant the smell of garlic. The composition of the glue-resin is 65.15% of resins, 12-48% of glue and 5.8-20% of essential oil. Ferular acid, asarezen, asarezenatanol, asarezinol and their esters with ferulic acid, as well as farnisiferol and umbelliferone compounds were isolated from resins. The essential oil is composed mainly of organic sulfides (up to 65%) and also contains pinene and oxycoumarin.

The root contains up to 9% resin. The resin contains up to 0.4% essential oil. Kovrak glue is used in folk medicine for the treatment of varicose veins, pulmonary tuberculosis, plague, ulcers, whooping cough, toothache, nervous and other diseases, as well as as a stimulant, expectorant. It is used as a decongestant and worm-driving medicine. Dangerous tumors and wounds are treated by crushing the very young branches of the bark and squeezing them into yogurt. It is used in asthma, vascular and neurological diseases in the form of tincture, emulsion and extract. In scientific medicine, brittle gum-resin is used as a powder, emulsion and tincture under the name "assa fetida" as a painkiller, expectorant, diuretic, stimulant and sedative, and is used in pharmacopoeia in many countries. included. In Eastern countries, Iran, Pakistan, Afghanistan and India are used in the manufacture of perfumed juice and the root as a spice in the food industry, in the manufacture of perfumes in the cosmetics industry.

### Conclusion:

Based on the above, it is necessary to widely inform our people about the medicinal properties of fenugreek. In addition, it is important that our doctors, who work in hospitals, as well as specialists in the field of folk medicine, widely use it in medical practice. We need to increase the amount of such plants so that they do not disappear in the future.

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