## AGROTECHNOLOGY OF CULTIVATION OF MEDICINAL KASHQARBE (*MELLILOTUS OFFICINALIS* DESCR) PLANT

Bustonova Surayyo - head teacher Mamirjonov Raxmatillo - student

## Andijan institute of agriculture and agrotechnologies, Uzbekistan

Abstract. Medicinal herbs of yelow sweetclover are used to treat wounds as a emollient. The article pe resents the results of research on the medical use and cultivation of medicinal melilot.

*Keywords:* Yelow sweet-clover, legumes, cultivation, coumarin, raw material, medicinal end others.

**Enter.** One of the main reasons for the further increase in the demand for medicinal plants and preparations obtained from them in the future in medicine is that the long-term continuous consumption of each chemical medicinal preparation obtained by synthesis leads to various unpleasant changes in the human and animal body. Accordingly, the need for phytopreparations and medicinal plants has been increasing in the world recently. This, in turn, leads to an even greater increase in the importance of the science of pharmacognosy.

**Botanical description.** Medicinal kashqarbeda (sariqbeda) – (Melilotus officinalis Desr.); Legumes belong to the Fabaceae family. A biennial herb growing 50-100 cm (sometimes 2 m) tall. The root is branchy, arrow root. The stem is single or multiple, pointed, and the upper part is branched. The leaf is a compound leaf with three plates, arranged in a row with a band of the stem. The flowers are small, yellow, clustered in stipules. The calyx is cut to half into 5 triangular lanceolate pieces. It blooms in June-September, and its seeds ripen from August [1, 2].

**Geographic distribution.** It grows on roadsides, meadows, and fields. It is mainly found in Ukraine, Belarus, Moldova, the Baltic States, the European part of Russia, Western Siberia, the Caucasus and Central Asia.

**Product preparation.** when the plant blooms, the upper part of the ground is harvested and the shade is dried on the ground. After drying, they are burned, the leaves and flowers are separated, and the stem is thrown away.

**Chemical composition.** The product contains up to 0.4-0.9% coumarin, dicumarin (dicumarol), melilotin, melilotoside glycoside, coumarin and melilotic acids and 0.01% essential oil. The smell of coumarin and partially melilotin gives the product a pleasant smell.

Usage. In medicine, it is used as an emollient and effective medicine (for pus absorption). Dicoumarol has an anti-coagulant effect in medicinal kashgar, which is 1000-5000 times stronger than coumarin. Coumarins contained in the plant are used as a remedy for insomnia in children due to their effect on the central nervous system. In folk medicine, it is used as an antitussive and emollient, pain reliever and sedative in diseases of the respiratory system.

**Technology of cultivation of medicinal kashkarbeda plant.** It grows in all soils distributed in Uzbekistan. The plant is very resistant to drought, cold and salinity. As it belongs to the family of leguminous plants, Kashgarbe enriches the soil with biological nitrogen. When planted on saline soils, it reduces seepage and reduces salinity. It is also a honey plant. The quality of the seed variety means, first of all, its purity or degree of contamination and typicality. Only fertile, clean (pure) seeds will fully transmit all the signs and characteristics of the variety, including high productivity, and ensure a high yield. Seeds are divided into three categories (categories) according to the quality of the variety, i.e. 1, 2 and 3, depending on the degree of purity. The purity of the crops is determined by approving.

Kashgarbe is a biennial plant, reaching 75-200 cm in height. In Kashgar, it is used as a medicinal plant in food and pharmacology. Aromatic coumarin is extracted from its flowers and fruits. In order to plant the plant, the land is plowed in autumn to a depth of 25-28 cm and fed with 50-60 kg of superphosphate fertilizer.

Kashgarbeda is propagated from seeds in autumn or early spring. It can be planted in areas free of various plants. The quality of seeds that meet state standards is planted. The land is harrowed and leveled with a trowel, and the seeds are sown in early spring with a grain seeder, 2025 kg of seeds are used per hectare. The planting depth should not exceed 2-3 cm. It is often planted in kashkarba together with cover crops. Its growth period lasts 85-140 days.

A plant planted in spring will sprout in 5-6 days. It grows rapidly during the flowering period, and the daily growth corresponds to 3-5 cm. It begins to grow in early spring. The flowering period lasts 14-15 days. The fruit is shed when ripe. Mineral nitrogen is not often used for Kashgarbeda, because it accumulates nitrogen itself. Therefore, more phosphorus and potassium fertilizers are required. During the initial development period, its exposure to phosphorus is high. If there is enough phosphorus in this period, it will develop well in the following periods as well. The effect of potassium is less than that of phosphorus. Therefore, it gives a good result if used together. It is recommended to use 90-110 kg of phosphorus and 50-60 kg of potassium during the growing season, depending on the type, fertility, and mechanical composition of the soil planted in Kashgar. If these fertilizers are added to organic fertilizers and a part is given before planting and after the first harvest, its development will be accelerated and the yield will be high. If the soil does not contain enough nitrogen, if its fertility is low, it is recommended to apply 40-50 kg of nitrogen fertilizer before planting. The use of micro-fertilizers (molybdenum, boron and manganese) in the growth and development of Kashgarbeda is appropriate.

Microfertilizers are mixed with other mineral fertilizers and seeds. Fertilization of kashgarbed should be done before watering.

**Product preparation.** Combing the plant for hay is done during the flowering period. The seed is collected before the second harvest. Harvesting begins when 30% of the pods are ripe. They can be crushed and cleaned in combine harvesters. Leaves and flowers are separated, and the stem is discarded.

The seeds are stored well when the moisture content is 15%, 10-12 centners of seeds per hectare are prepared from one harvest. It is recommended to water Kashgarbeda 5-6 times during the growing season.

**Conclusions and recommendations.** Cultivation of medicinal plants is important in Kashgarba. It is considered a promising and valuable medicinal plant in Kashgar, and it can be cultivated in all mountain and sub-mountain regions of our Republic on soils with a light mechanical composition. Since the plant needs water well, it is advisable to choose areas with sewage nearby.

## References

1. Axmedov O'., Ergashev A., Abzalov A. Dorivor o'simliklar va ularni yetishtirish texnologiyasi. Toshkent 2018.

2. Xolmatov X., Ahmedov O'. "Farmakognoziya" Toshkent 1997.