

Chemical Composition And Medicinal Properties Of The Mulberry Plant

Gulchexra Salavatovna Meliboyeva

Associate professor Department Of Chemistry, Kokand State Pedagogical Institute, Uzbekistan

Abstract.

Mulberry fruit strengthens the immune system, strengthens the body's defense system against infectious diseases, prevents premature wrinkling of the skin, improves vision, and protects against diseases such as retinal damage. Mulberry leaves and bark are also rich in various biologically active substances. The leaves contain flavonoids, vitamins, carotene, essential oil, organic acids, and the bark of the tree has been found to contain coloring and tonic substances, and various acids. Mulberry juice is also widely used to purify the blood and increase blood volume. A decoction of the leaves was used as a fever reducer and thirst quencher for angina and other colds. The article provides information about the chemical composition, biological value and medicinal properties of mulberry, as well as useful recipes for its use.

Key words: Mulberry fruits, white mulberry (Balkh mulberry) vitamins, Mulberry use in folk medicine, rheumatism, healing properties of mulberry.

INTRODUCTION.

MULBERRY (*Morus*) — a genus of trees belonging to the mulberry family; fruit tree; 5 species are grown in Uzbekistan. The fruits of white mulberry (*M. alba*) and black mulberry (*M. nigra*) are consumed. The mulberry (*M. multicaulis*), kagayama mulberry (*M. Kagayame*) and silkworm mulberry (*M. bonabycis*) are mainly used for raising silkworms. Mulberry grows quickly, is drought and cold-resistant. The branches are dense, broadly rounded, oval and pyramidal in shape. The height is 15-18, some are 20-25 m, and the thickness is up to 1.5 m. From adult tall mulberry trees, up to 20-40 kg of leaves and 50-60 kg of fruit are obtained. There are also varieties of mulberry that grow crookedly (snake-weed) and downward (mad mulberry). The tree lives for 300, some for 500 years.

The fruits of white mulberry (Balkh mulberry) and shotut are sweet, healing, and rich in various vitamins. Mulberry has been cultivated and grown in Uzbekistan since ancient times. It is consumed fresh, and is used to make molasses, jam, and raisins. Mulberry leaves are used to feed

silkworms. Since mulberry leaves are a necessary food for silkworms, they have always been included in the list of valuable plants. In addition, musical instruments and writing paper have been made from mulberry trees since ancient times. Worms do not fall into cradles made of mulberry bark, and our mothers, wishing that our children would reproduce from themselves, would give their children a fruit tree - a baby - in cradles made of mulberry. There are mainly two types of this fruit tree that are considered edible. These are white mulberry and shotut. Shotut is also called black mulberry.



MATERIALS AND METHODS

Mulberries are consumed when fully ripe, juicy, freshly picked, or dried (mulberry raisins). Mulberries are also used to make various pastries, jams and marmalades, jellies, and molasses.

Mulberry fruit composition



Mulberry fruit is watery, it contains up to 82.9-86.2% water. In addition, it is a very juicy fruit - it contains up to 10.9-12.7% sugar. If mulberry is dried and consumed, its juiciness increases even more. The sugar content in mulberry raisins is 73.29-83.71%. In addition, mulberry is rich in vitamins B, C, E, K, PP. Accordingly, it is recommended to consume it for people who are weakened by illness and often catch colds.

Of the minerals, it is rich in potassium, sodium, zinc, selenium, copper, phosphorus, calcium, magnesium, iron, and its seeds contain up to 24-33% fat and other nutrients. Since it contains a large amount of phosphorus, mulberry is considered a valuable resource for people engaged in mental activity. For pregnant women, mulberry fruit is also a source of necessary nutrients for the good development of the fetus.

Mulberry fruit strengthens the immune system, strengthens the body's defense system against infectious diseases, prevents premature wrinkling of the skin, improves vision, and protects against diseases such as retinal damage.

Mulberry leaf composition. Mulberry leaves and bark are also rich in various biologically active substances. The leaves contain flavonoids, vitamins, carotene, essential oil, organic acids, and the bark of the tree has been found to contain coloring and tonic substances, and various acids.

Mulberry use in folk medicine

Mulberry juice is also widely used to purify the blood and increase blood volume. A decoction of the leaves was used as a fever reducer and thirst quencher for angina and other colds.

Our great compatriot Abu Ali ibn Sino used mulberry as a healing agent.

In the "Medical Treatise" of Abu Ali ibn Sina, it is written about mulberry: "Sour mulberry reduces swelling of the mouth and throat, and its leaves are useful for swellings on both sides of the throat. If you rinse your mouth with the juice of sour mulberry leaves, it will cure toothache. All types of mulberry should be eaten before meals, so that they do not harm the stomach." Its healing properties are that if mulberry, vine and black fig leaves are boiled in rainwater and used, it will darken the hair. White mulberry leaves are used for sore throats, freshly picked leaf juice is used for toothaches, and mulberry fruit and its juice are used for swellings in the mouth and throat. Salted and dried mulberry treats diarrhea. In the treatment of kidney and cardiovascular diseases, mulberry fruit is a diuretic that cleanses the body of excess fluid. Mulberries should be eaten before meals, so that they do not harm the stomach. Mulberries, dried and made into a decoction or compote, can cure indigestion, help with weight loss, and cleanse the body.

In winter, mulberry buds are harvested, cleaned, and the infusion is drunk to support the heart. Mulberry flowers mixed with vegetable oil and left in a dark place make an excellent cream for treating small acne, spots, and freckles on the skin. When treating old wounds and damaged areas on the body, crushed mulberry leaves and branches mixed

with vegetable oil and applied, the wounds heal quickly and there are no scars on the skin.

Nutritional value of mulberry - 70 kcal

Fresh mulberry (or canned) fruit juice helps with chest pain and shortness of breath. For treatment, mulberry juice is drunk for three weeks. Surprisingly, in this short period of time, the heart function is fully restored and healed.

Freshly obtained mulberry juice has all the beneficial healing properties of mulberry. It is an active agent in the treatment of respiratory tract, tonsillitis and angina, and also gives positive results in the treatment of chronic cough, pneumonia and bronchitis. It is of great benefit to people engaged in mental work, because the phosphorus in its composition improves mental activity.

Usually, mulberry fruit is consumed fresh, but it is also used in compotes, jams, jelly, syrups, and baked goods. Mulberry fruit is consumed when it has ripened near the place of residence. It is not recommended to transport it for long distances, as it will spoil before it arrives.

Mulberry juice has a strong diaphoretic effect, so it is recommended to make tea from it and drink it when you have a cold. For general strengthening of the body, one teaspoon of dried mulberry leaves is added to various dishes and consumed daily.

In diseases of the oral cavity, stomatitis, periodontitis, ulcers and throat diseases, gargling with mulberry fruit tincture gives good results. To prepare this tincture, pour 200 g of boiling water over 2 tablespoons of crushed mulberry fruit.

Benefits of mulberry root

To normalize blood pressure and the circulatory system, it is recommended to drink a decoction of the root of the tree, which is prepared as follows:

1. 50 g of the root is crushed and poured with 1 liter of boiling water.
2. After an hour, put on low heat for 15 minutes.
3. Cool and strain through gauze.

4. Drink one third of a glass three times a day (you can add a little honey to make it more juicy).

The healing properties of mulberry fruit have also been proven by scientific studies. During the studies, good results were achieved in the treatment of weakening of the contractile force of the heart muscle (myocardiodystrophy) with the help of white mulberry fruit. With the help of mulberry, shortness of breath and heart pain were reduced in patients, the heartbeat became regular, and the swelling caused by excess fluid accumulation also disappeared.

RESULTS AND DISCUSSION

Natural recipes using mulberry plants

For the treatment of rheumatism Mulberry leaves and branches are thoroughly washed and chopped. Place in a large bowl, pour water until the surface of the branches is covered, and leave on a gas stove for 2 hours. Pour the decoction in the bowl into a basin and take a foot bath. Apply the hot leaves to the painful areas and wrap them in a clean cloth and woolen scarf. The treatment is done before going to bed. After a course of 4-5 treatments, the pain in the legs decreases.

When the sugar content increases, the mulberry leaves are taken, washed thoroughly, crushed, 2 tablespoons are poured with 1 cup of boiling water and left in a thermos overnight. Then drink 1-2 sips throughout the day instead of tea. The course of treatment is 10 days.

In the treatment of eye diseases. A handful of dried mulberry leaves are poured with 1 cup of boiling water and boiled in water vapor for 10 minutes. When cooled and applied to the skin of the eyelids, it helps with eye inflammation and eye discharge. Soaking a piece of bandage in the infusion, applying a compress to the eyes and lying down for 20 minutes will cure blurred vision.

To relieve colds and shivering, a decoction of leaves and branches is drunk 3-4 times a day,

adding a little mint to it. This decoction is even better than raspberry tea.

In the treatment of goiter, white mulberry is very useful in thyroid diseases. For this, you need to eat up to 3 mulberry fruits every day at 9 am. This is because at this time the thyroid gland is very active and produces even more iodine under the influence of drugs.

Contraindications for mulberry consumption

People with intestinal diseases, those prone to diarrhea, diabetes, and high blood pressure are not recommended to consume mulberries in excess. In order to avoid harm to the body, it is important to remember that ripe mulberries can cause diarrhea, and unripe raw fruits can cause constipation.

After eating freshly picked mulberry fruits, you should not drink cold water, as this can cause stomach upset and disruption of the gastrointestinal tract. Its sweet varieties are not recommended for people with diabetes and high blood pressure. It is also not recommended for people who are allergic to mulberries.

CONCLUSION.

So, we have become familiar with the chemical composition and beneficial properties of mulberry. The correct use of mulberry in everyday life is useful for every organism. So, eat more mulberries in the spring and summer months, don't miss out on their sweet taste and healing properties. Take care of yourself and take care of your health.

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