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## BIOECOLOGY AND USEFUL PROPERTIES OF PAPAYA OR MELON TREE

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### ABSTRACT

*In this article, information on the bioecology of the Papaya plant and the nature of the treatment of certain diseases in the human body, as well as their prevention, is presented. From the fruit of the papaya and vegetative organs, more than 100 different products and preparations are prepared. In order to grow papaya in room conditions, it is possible to reproduce it vegetatively, mainly with the help of seeds and a pencil, and various recommendations are also given.*

**KEYWORDS:** *Vital Form, Alkaloid, Kanserogen Substance, Milk Juice, Rosehip, Sepal.*

### INTRODUCTION

Plants and animals are one of the main components of the life shell of the Earth-the biosphere, which occupies a special place among natural resources. When plants and animals are used wisely, they can become a source of renewable and unlimited products. The specific stable balance in the biosphere in many respects is due to the presence in it of Biological Diversity of plants and animals.

"After the creation of the universe of spirits and bodies, the Lord created three children: a mineral, a plant and an animal, and then a man in the end" (20) plants and animals are considered the genophones of the planet, and each species has its own place in nature. In the biosphere, the circulating movement of substances takes place only with the participation of living organisms. This process can also be seen on the example of the circulating action of ughlerod (CO<sub>2</sub>) in the biosphere. Without the products of plants and animals, human life can not be imagined.

If you look at the history of farming, along with the domestic ozocabop technical plant species, which are characteristic of each country, they are imported from abroad, and from the account of cultural crops, which are of great importance for different branches of the nation's economy, where they are climatized, their types and varieties are increasing. At the pace of modern life, pressure and tension in the work often occur, health indicators can worsen. We at the first signs of diseases are accustomed to drink without paying attention to the chemical composition of the drug. We often forget about natural remedies that are effective and safe. Today we will talk about an exotic fruit that has become a real gift to health.

### **Main part**

The Papaya plant belongs to the family of papayadots (*Carica papaya*, Caricaceae), 4 categories of this family and about 30 species are common on the Earth's surface mainly in areas of tropical and subtropical climate of America and Africa.

Papaya has a unique vital form, somewhat similar in appearance to trees, though, but its almost unbroken stem, which grows erect, is not wooded. The height of the stem reaches 4-6 meters. The inner part of the young stem, sprouted from the seeds of the papaya, consists of soft porous tissue. As the plant grows larger, the tissue inside its stem is destroyed, the hollow tube passes into an empty position, and the thick intertwined fibers on the outside of its stem perform the task of keeping the stem upright, giving it consistency.

The leaves are simple, long bandaged, with a bud on the body part of the STEM and are located like an umbrella. The leaf plate is cut into slices or fingers with a barbell.

The heels will develop from the flower buds in the Leaf armpits, hanging downwards. The length of the male heels on which the daggers are located reaches 1 meter. The wreath is complex, the saucer is small, and from the basis it is added and grown. It consists of 5 petals, on which the petals grow with the addition of a tube. Pollen was observed to be 10 pieces, in some flowers 5 pieces, sometimes even less. The Seeder has 5 fruits, not grown with the addition of stalks. Flowers actinomorpha. Node top. In the papayas, 5 different types of flowers were observed. In the first type, all flowers consist only of seeds (ginesiy), the pollen is not developed at all. With the addition of the petals did not grow. Flowers of the second type are only pollen-bearing, they are small compared to coniferous flowers, the petals in the inflorescence formed a long tube, and more than half part was added and grown. Inside it there are 10 dusters. And the Seeder is reductioned. The flowers of the third type are of two sexes. There are 5 of them are pollen-growers and Seed-Growers. And on the fourth and fifth heels it is possible to observe cases of transition from two genders to one genders, that the pollen was from 2 to 10 soles, that the Seeder did not develop well, or in a normal civilized form. The flowers of papaya are mostly pollinated from the outside. In days when there is a wind, it is pollinated with the help of wind (anemophil), and in times when the air is calm, with the help of insects (entomophil). Self-pollination was also observed in the flowers of the genus. Bunda pollen and seeds are grown in the pollen without blooming, and they are fertilized. The fruit develops from the flowers of the sprouted seedling. The fruit is similar in appearance to the fruit of zucchini or melons.

The length of the fruit is up to 70 cm, the width is up to 40 cm. The weight of each fruit is 6-7kg. In cultural varieties, the weight of the fruit is 1-3 kg. The outer layer of the fruit has a yellowish-green or golden color. The fruit of the yellow-maple color is more juicy than the fruit of the pale

yellow-maple color. The inside of the fruit will be empty, only the part stuck to the fruit peel will be desired layer 2-2, 5 cm thick. It has a bluish tint. In its fruit, up to 300-700 seeds are formed. Papaya grows mainly from seeds. Inside the fruit of some cultural varieties there will be no seeds.

The composition of Papaya fruit also includes milk juice of white color. Articular milk tubes, which cover the inside of the fruit, are located a lot, especially on the outer layer of the fruit.

In order to obtain milk juice from the fruit, when slicing its unripe green fruit with a knife or a sharp razor, the white milk juice in it decomposes, and due to the water shine in it, it thickens in the fruit peel. Picking it up is used for different purposes. Its composition of milk juice contains all sorts of alkaloids. Therefore, the raw fruit is poisonous. From one hectare of papaya it is possible to harvest 400kg of papatin per year. The composition of Papaya fruit is determined by the presence of glucose, fructose, organic acids, ketchup, protein, vitamins C beta-carotene, vitamins B1, B2, B5, mineral substances K, Ca, R, Na, Fe. In 100 gr of its fruit consumed contains 26-34 calories. When the Papaya fruit ripens, the milk in it passes into a liquid state similar to the glaze water and loses its poisonous properties. The composition of milk juice includes such protsolitin ferments as phenopapain, proteinase papain, proteinase "SH", which in terms of their physiological properties are similar to gastric juice. Therefore, the fruit of this plant is of great importance in improving digestion, being used as a dietary food. In addition to the raw fruit of milk juice, it is found that it is contained in the leaves and stems of the plant. If you take a piece of meat that is difficult to ripen and wrap it in a papaya leaf, it will immediately become soft and cooked.

Local residents of the US State of Florida also use the plant leaf in washing laundry with the name "negretan soap", putting it in laundry water. Papaya is also used in sharpening beer drinks, giving aromatic aroma in cheeses. From the drying of milk juice is used in the treatment of gastrointestinal diseases and eczema. Preparations from papain, xenopapain, peptitases and other types of flour, obtained from which the milk juice is processed, are widely used in medicine.

The original homeland of the papaya is South America and southern Mexico. In the XVI century, the Spaniards and the Portuguese distributed it to countries with a subtropical and tropical climate. The wild type of melon tree is not found. It is believed that this cultural species originated due to the fact that many species of carica genus grow in America.

Currently, more than 1000 varieties of this plant are grown worldwide. In addition to tropical Africa, the melon tree is cultivated in Brazil, Mexico, Nigeria, India, Indonesia, Sri Lanka, Pakistan, East Africa, Australia, in the countries around the Mediterranean Sea in the subtropical climatic areas of the Black Sea of the Caucasus, and now it is grown in some greenhouses even on the territory of our republic. Melon tree is a plant that quickly comes to fruiting. Papaya, grown from seeds in Indonesia, blossomed after 3 months in the first year. Papaya basically gives a good harvest in 2-5 years. When it is well cared for, it will last 5 years, and then it will dry up. In tropical conditions, it yields throughout the year.

From the fruit of papaya and vegetative organs, more than 100 different products with a name, preparations are prepared. Its fruit can be eaten both in moderation and dried and crushed. Local people eat papaya's fruit grown in tropical and subtropical climates, mainly in the morning breakfast. In addition, from its fruit is used in the preparation of various salads, pies, juices and

confectionery products. The STEM is used in the preparation of rope and other fibrous things from the thick fibrous fiber in the body. The most important aspect of papaya is its medicinal properties.

At present, it is no secret that various diseases have arisen due to the increased content of various carcinogens in a comprehensively polluted environment. It has been found that it is a unique product, especially in the Prevention of various cancer diseases, when treating the spine.

Below we explain the mysterious features of papaya on the circle of healing effects:

- The substance found in the fruit, seeds and leaves of papaya is given in the results of scientific studies of scientists of Great Britain, America and Japan about the property of stopping the growth of cancer cells. According to their data, it was observed that the substances obtained from papaya decreased and stopped the growth of cancer cells of the breast, liver, pancreas after 24 hours;
- Prevents and heals the accumulation of salt (osteochondrosis) in human organs and tissues;
- Heals spine osteochondrosis;
- Gives a good result in the treatment of arthrosis of the joints;
- Heals the disc hernia between the spine;
- Prevents diabetes;
- Used in the treatment of liver diseases;
- Prevents anemia (anemia);
- Normalizes gastric juice.
- Smooths skin, smooths;
- Protects skin from the appearance of wrinkles;
- Organic acids contained in the fruit prevent hair loss;
- Heals eczema, wounds, packaging, cutaneous, sepals;
- Papain in its composition has a good effect on digestion;
- Helps constipation;
- Reduces pain and fever;
- Increases the tone and strength of the body;
- Relieves of anemia and fatigue;
- Immunitetni kuchaytiradi;
- Prevents gastrointestinal diseases;
- Reduces excess weight;
- It also has substances that treat eye diseases;
- Used in the treatment of diseases of caries, pulpitis, periodontitis, stomatitis;

- Used in the prevention and treatment of diseases caused by colds and scar formation of sexual organs;
- helps relieve symptoms of weakness, excessive sleep and excessive sweating;
- Has the ability to drive away vomiting and worms.

Papaya is famous for vitamins C, A and E - the most popular and common antioxidants:

- Vitamin C cleanses poisons, heart diseases, oncology and inflammatory processes, strengthens the immune system to fight seasonal viruses;
- Vitamin A heals and heals the skin, protects the eyes, promotes the health of the lungs, prevents the accumulation of cancer and kidney stones;
- Vitamin E is useful for bladder and prostate cancer, Alzheimer's disease, inflammatory diseases and metabolic disorders.

Other plant antioxidants are also found in papaya: zeaxanthin, lutein and lycopene. Especially lycopene: 100 g to 2000 ME, other valuable substances: folic acid, potassium, calcium, chlorine, iron, phosphorus, silicon and sodium.

Useful properties of papaya:

- It strengthens the immune system, helps fight diseases in the body due to its anti-inflammatory properties.
- Papaya fruits benefit those who adhere to the body mass index. Mono-there are many different diets that include diet.
- The benefits of papaya are very important for the circulatory system: the amount of cholesterol decreases, the blood vessels are cleared, and the probability of thrombosis decreases.
- For external use, skin burns, insect bites, skin irritation from eczema are indicated. Masters of beauty use the juice as a means of scraping, and for smoothing the inflammatory processes of the skin.
- Speaking about the Prevention of caries and reducing bleeding, dentists claim that there are many benefits to regular consumption of papaya fruit pulp.
- If there are cases when it is impossible to apply, slices of well-ripened berries can be offered to children from the age of two, it is quickly absorbed and has a tonic effect.
- Abroad, "melon" helps to remove toxins from the body.
- Slows Retinal aging.

Men who eat 100-200 g of papaya per day contribute to the duration of sexual life and the onset of sexual activity.

The smell of fruit is similar to the smell of forest raspberries. Lack of smell and excessive stiffness, as well as uneven coloring indicate that papaya is not mature, this fruit can be poisoned. Papaya can be left to ripen at home, but the taste is already lost.

When cut, we blind the juicy pulp, in the middle a cavity consisting of seeds. Meat is close to melon according to taste. The seeds themselves do not usually eat, but the locals use them to prepare a seasoning similar to black pepper.

Due to the composition of the papaya, its properties are diverse, which can be of benefit to different systems of the human body. Papaya seeds contain palmitic and oleic acids - these acids help prevent cancer. Papain natural ferment is contained in papaya, which contributes to the digestion of protein foods. The benefit of papain is that it breaks down the fibrin protein, which is present in cancer cells. Plantain papain inhibits the emergence of tumors and metastases in the early stages.

But in addition to describing the useful properties of papaya, it is permissible to pay attention to some of its negative effects.

Important! Unripe papaya fruit is a danger for a pregnant organism, if a pregnant woman eats several pieces of such papaya, this will lead to bad consequences (interruption of pregnancy or bleeding).

According to reports from the internet, in order to grow papaya in room conditions, it is possible to reproduce it vegetative, mainly with the help of seeds and a pencil. The seeds, separated from the well-ripened papaya fruit to reproduce from the seeds, mix the soil, sand and well-decomposed gooseberry mixed soils prepared from the Leaf at the beginning of March, moisten it in its norm, and put it in the pot and plant seeds into it. In each pot, 2-3 seeds are sown to a depth of 3cm. It is desirable to soak the seeds for 1-2 days before planting. After the seeds have sprouted, one good seedling is left, the rest is plucked. There are two types of papaya that can be planted: Hawaiian and Mexican types.

The fruit of the Hawaiian type is slightly smaller, length 10-20 cm, Weight up to 0, 5 kg. The height of the plant is 1-1, 5 m.it is convenient to harvest the harvest. The fruit is sweet and aromatic smelling. The fruit of the Mexican papaya type is large, about 40 cm long, weighs 4,5 kg. The height of the plant reaches 6-10 m. It is more convenient to grow a Mexican type. Under the pots planted Papaya, the temperature is desirable to be 27-30 C. After sprouting seeds planted in the spring are transplanted 2-3 times a year into the canvases of the other, that is, 5-6 m larger in diameter than the previous one. Papaya is a warm-loving and light-loving plant. Therefore, low-temperature conditions adversely affect its growth, and the taste of its fruit becomes less juicy. In summer, it is more likely that the plant will absorb moisture, so it is necessary to moisten its growing soil more often in the amount of moisture , meeting the demand for water, even by spraying water on the plant. But if a lot of water is given to his growing canvas, the root can rot.

To reproduce the papaya with the help of a pencil, a pencil is taken from a plant for one or two years. The thickness of the cuttings should be about 1,5 cm. Cuttings are prepared by cutting into Length 10 cm. Since there is a lot of water in the composition of a clean cut pencil, it can be kept in a dry place for 1-3 days, after reducing the water contained in it, it is possible to pass it to the canvases in an environment where the sand particles are larger and grow roots. After the seeds of papaya or those grown with the help of a pencil reach 12-15 CM, the plant spacing is 1, 5 m for growing it in greenhouse conditions, and the range is 1m.

## CONCLUSION

There are no contraindications to the use of papaya. Therefore, if you keep eating papaya fruit, you will have a prevention of the above diseases. In the future, we hope that the melon tree will also become one of the useful plants grown in our republic.



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