

## The Plantain and its Importance in Modern Medicine

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**Annotation:** The plantain grows along the road, in villages, yards and gardens. Its beneficial properties were known from the Middle Ages. The Avicenna used the leaves of this plant to stop bleeding against the background of wounds and inflammation. Even since the beneficial properties of the plant have been proven in practical medicine, various drug forms of plantain are effectively used. In the treatment of inflammatory processes in the kidneys and liver, tumors with eye diseases, in the treatment of tumors that do not have a dangerous property, plantain parts were used. Plantain seeds are recommended by doctors to treat intestinal diseases and deep lung damage.

**Keywords:** Plantain, extract, syrup, tincturae, Phytobalans, Plantoglucid, Plantain lanceolate.

Plantain (*Plantago*) is an annual and perennial herbaceous plant in the family (*Plantaginaceae*), rarely found in semi-shrubs. There are more than 250 species with a worldwide distribution. In Uzbekistan, 6 species are found, 4 species are used as medicinal plants. The most common species are medium-sized plantain (*Plantago media*), large plantain (*Plantago major*), and lanceoid plantain (*Plantago lanceolatae*), which are perennial grasses. Plantain is found along roadsides, in weeds, loose areas, steppes, grasslands, even Sands. A large species of plantain usually has a short rhizome surrounded by thin, thread-like roots. Perpendicular grown erect and leafless, 15-45 cm high. Blooms from May — June to August — September. In some species, the flower stem is branched, leafy. Almost all types of plantain are similar to each other. Plantain grows almost everywhere and in all regions. The look is simple and beautiful. The leaves are simple, broadly ovoid or broadly elliptical in shape, some rounded, pointed or blunt at the tip, winged, glabrous, of various lengths. The edge of the Leaf is entire or slightly toothed, arcuate; the leaf surface is glabrous on both sides, the color is light green to brown-green. The smell is weak. The taste of its water is slightly bitter.

In many European countries, a variety of plantain (*Plantago coronopus*) is used as a vegetable plant, and it is grown and vitamin salads are prepared from it. As a medicinal raw material, the leaf of a large species of plantain (*lot. folium Plantaginis majoris*) and freshly sprouted grass (*herbae Plantaginis majoris recens*) are used. Preparations made from large turinig leaves have a versatile healing effect. In the 100 g fresh stem of a large species of plantain, proteins are found in 1.6 g, nutrient fiber in 1.6 g, vitamin C in 33.3 mg, potassium in 382 mg, magnesium in 22 mg, calcium in 241 mg, iron in 5.6 mg, phosphorus in 41 mg. In 100 g of fresh leaves of a large species of plantain, water is found in 84 g, proteins in 2.5 g, fats in 0.3 g, carbohydrates in 14.6 g, calorie content in 61 kcal, calcium in 184 mg, manganese in 1.2 mg, vitamin PP in 0.8 mg, vitamin C in 44.9 mg, vitamin B2 in 0.28 mg, vitamin A in 0.08 mg. In 100 g of seeds of a large species of plantain, carbohydrates are 59.5 g, proteins are 17 g, nutrient fiber is 13.7 g, fats are 7.6 g, water is 11 g. occurs at. In the large-leaved species of plantain and in the leaves of the lanceolate species there are polysaccharides, including mucus (up to 11%), iridoid glycoside aucubin, polysaccharides, flavanoids, carotenoids, tannin, ascorbic acid, mineral salts, silicon, zinc, choline.

Saponins, pectin substances, flavonoids and help lower cholesterol in the blood and provide the following. The substance aucubin has a beneficial effect on the gastrointestinal tract, has antimicrobial, antiseptic, spasmolytic, anti-inflammatory and sedative properties. Therefore, preparations based on plant leaves normalize the functioning of the stomach and intestines and are effective in the treatment of diseases of the cardiovascular and nervous system. Avicenna used the wound healing and hemostatic properties of the plant in his practice. Phytobalance capsules contain 150mg plantain seed extract. Plantain has properties that can relax and envelop the intestine lightly due to its production of

sufficient mucus. Plantain normalizes constipation in the large intestine with increased stool mass and softness. Plantain helps to absorb the bacteria that provoke the disease at the expense of the iridoid glycoside aucubin, which is contained in seed pods, and to release slags and “harmful” cholesterol from the body. Aucubin serves as a “natural antibiotic”. In addition to the glycoside aucubin, plantain leaves are rich in microelements such as calcium and magnesium, contain flavonoids and saponins, bitter and tannins, vitamins K and U, carotene and pectin, ascorbic, lemon and oleanolic acids. Therefore, infusions and extracts from Plantain leaves are used to increase gastric secretion. Oleanolic acid in Plantain has a relaxing effect. Choline is a vitamin belonging to Group B. In the absence of choline in the food, fat presses on the liver, the kidneys and blood-making organs are damaged. Plantains have a blood — stopping, anti-inflammatory and wound healing effect—as you know, the leaves of this plant (which must first be chewed or crushed to release juice) are disinfected and applied to the wound. Plantain leaf is also used as a tea in the treatment of cough in children. In folk medicine, a decoction of leaves is recommended for allergies, fever, diarrhea, hemorrhoids, inflammation of the bladder, stomach and lung cancer. Freshly sprouted leaves are applied to wounds, redness, flaking, cuts. Ointment made with dried plantain powder is an effective remedy for the treatment of pustules (skin diseases). In the preparation of Plantain ointment, washed and dried and crushed leaves, 120 ml of coconut oil, 15 g of beeswax are mixed together, coconut oil and leaves are boiled in a water bath, then melted beeswax is added, and this ointment helps moisturize the skin, heals cracks, is used to treat the skin in Burns. In scientific medicine, leaves are used as wound healing, anti-inflammatory, hemostatic, analgesic, bactericidal (stops the growth and development of bacteria) and anti-allergic agent. Tincture of leaves is used to treat bronchitis, tuberculosis, whooping cough, bronchial asthma, diseases of the gastrointestinal tract, including ulcers and duodenal ulcers, kidney inflammation. Juice from freshly grown grass is an antacid (reduces the production of HCl from the stomach glands, neutralizes acidity) and an effective remedy for the treatment of chronic gastritis. The alcohol extract of the leaves lowers blood pressure. The folds of plantain are also used in the treatment of respiratory diseases. Plantain juice is used to treat gastritis (inflammation of the gastric mucosa), dyspepsia (nausea), anorexia (weight loss). The drug "Plantaglusid", which has a spasmolytic and anti-inflammatory effect and is used for stomach and duodenal ulcers, is obtained from a large aqueous extract of plantain. The drug Plantaglusid is also used in the treatment of acute and chronic gastritis, enterocolitis, dysbacteriosis, rhinitis, bronchitis, pneumonia and whooping cough. The mucus substance contained in the plant protects the airways, dilutes phlegm and relieves the inflammatory process. Pectin substances protect the wound in the stomach, reduce cholesterol. Plantain seeds have properties that increase immunity. The leaves of the Asian species of plantain have high immunomodulatory properties. Plantain juice has a noticeable antiallergic effect. Studies have shown that the use of plantain extract leads to a significant decrease in the body mass index, a slight decrease in blood glucose levels. Any part of the plant stops bleeding from the nose, blood stops vomiting, heals epilepsy (seizures). The warm juice of the plantain included in the ear will help relieve ear pain. The juice from the tincture and root of the plant is used to rinse the mouth, treat inflammation of the oral mucosa, toothache, and treat all serious diseases of the oral mucosa. Plantain is also part of the syrups Herbion ( lanceolate leaf) and Eucabal (liquid extract of plantain 3 g) and is mainly recommended to relieve dry cough, and also has anti-inflammatory and antibacterial effects. Condensed juice improves the performance of the liver, kidneys and spleen, soothes thirst, normalizes digestion. It stops bleeding from all internal organs, heals gonorrhea, stops menstruation. Decoctions from Plantain leaves are used as a tonic, to treat inflammation of the bladder, enuresis. Mixtures with other plants are used to treat prostate adenoma, male infertility and prostatitis. Plantain tea 1 cup chopped and dried leaves are infused with 2 cups of boiling water and tightly closed and cooled. Such tea should be stored in the refrigerator, and even if you add honey to it. Tea as a tonic and in the treatment of diarrhea and relieves symptoms helps. It can also be used to wash, treat wounds, eczema, rashes, burns. For diseases of the gastrointestinal tract, juice, decoctions and syrups are used. In addition to treating gastrointestinal diseases, the juice is effective for the Prevention of heart disease, neuroses, has tonic properties, lowers cholesterol, blood pressure and stops the growth of pathogenic staphylococci, hemolytic streptococci and *Pseudomonas aeruginosa*. Therefore, externally they are effective in treating the consequences of

boils, post-bruising edema, dermatitis and insect bites. When coughing, hot decoctions of plantain contribute to the dilution and release of sputum in diseases of the respiratory tract, that is, acute respiratory viral infections, bronchitis, bronchial asthma, whooping cough and even tuberculosis. 1 tablespoon of dry chopped leaves is infused with a glass of boiling water, placed in a warm place or wrapped in a warm cloth for 15 minutes. The tincture is prescribed when drinking 1 tablespoon 4 times an hour before meals. Plantain leaves are used for diarrhea, reducing pain in spasms. 2 tablespoons of dried leaves and boil them in a boiling water bath for half an hour with 1 glass of boiling water. Only clean leaves can also be used on the stems. Fresh leaves are thoroughly washed and cut and placed on damaged skin, and a tie is placed. At mild degrees of burns, such bandages are used several times a day and replaced every hour.

For the preparation of ointments on wounds and carbons, dried plantain leaves and a few drops of vegetable oil or Vaseline oil are mixed in a 9:1 ratio and applied to the desired area. Due to the presence of biogenic micro-and macronutrient, plantain is an effective remedy in the treatment of pulmonary tuberculosis. Extracts of the Asian type of plantain have a pronounced neuroprotective effect and prevent the development of nephrotic syndrome. When preparing a decoction from the plantain plant in narrowing of arterial blood vessels (atherosclerosis), a glass of boiling sub is poured into the Chopped leaf of a tablespoon of plantain, infused for 30 minutes and drunk. In folk medicine, its juice is considered one of the strongest phlegm transporters. In the catarrhal angina (acute inflammation of the tonsils in the throat), the throat with the juice of The Lancet plantain is rinsed several times a day. Consumption of plantain seeds stops bleeding from internal organs. Lentils treat shortness of breath if boiled with plantain leaves and eaten. Plantain seeds are useful for treating male and female reproductive problems. For the treatment of constipation and chronic colitis, a decoction of Indian plantain seeds is used, in which 10 g of seeds are infused with a glass of boiling water and drunk a tablespoon a day on an empty stomach. In the case of inflammation of the eyes and purulent divorces from them, compresses from a water tincture of Lancet plantain are recommended. It is used in cosmetology to reduce acne, wrinkles, oiliness of the skin and eliminate redness. When applied externally, it is an effective remedy for dermatitis, wounds, injuries, bruises, trophic ulcers, boils, carbuncles and burns. On the face, decoctions for washing hair, various cosmetics were produced. Steam baths with plantain are useful for problem skin. For owners of Normal skin, the mask is prepared as follows, in which a tablespoon of finely chopped leaves is infused in less water, and when cooled, a tablespoon of sour cream and egg yolk is mixed, applied to the area of the face and neck, and the facial skin is washed off after a quarter of an hour. For dry skin, a mask based on plantain, aloe and sunflower oil is used, in which 65 ml of oil is heated in a water bath, finely chopped leaves are added two teaspoons and boiled for a few minutes, then 0.5 tablespoons of aloe juice are applied to the broth. The mask is wiped on the face and neck area with a cotton pad. After 20 minutes, the face is wiped or washed off with warm water. To prepare a mask for oily facial skin, a plant mixture with plantain, rose, nettle and mint is used, in which 50 ml of boiling water 2 teaspoons of plantain leaf, Rose and nettle- each from a teaspoon, mint-0.5 tablespoons are taken and infused, leached and wiped face and neck, washed off after 20 minutes. Plantain helps to remove black dots on the face, a tablespoon of plantain , calendula (fingernail) and sorrel leaves is taken in equal amounts, the tincture is leaked, when it cools down, mixed with egg white and applied to the face. After 20 minutes, the skin is washed off. This tincture is also useful for problem faces. For problematic, oily facial skin, a mask made from plantain, oatmeal and lemon juice is used. A teaspoon of chopped leaves is infused with 3 cups of boiling water, after filtering, a tablespoon of oatmeal and 1 teaspoon of lemon juice are added and applied to the cleaned face for a quarter of an hour, then rinsed with warm water. When preparing a hair mask, two tablespoons of plantain leaves are poured with 0.5 cups of boiling water and poured with 0.5 cups of milk when leaking. It is applied to the scalp, wrapped in polyethylene and a towel for 20 minutes, and the hair is thoroughly washed with warm water. Plantain seeds ground with salt, when used externally, eliminate the poison of a rabid dog. Crushed roots and leaves, as well as the powder of its dried leaves, when applied locally, cleanse wounds from fire, heal old dangerous wounds, burns, deep wounds. plantain and preparations based on it should not be used for thrombophlebitis, allergy predisposition and blood clotting disorders. Although there is no data on the harm of plantain in pregnant and

lactating women, it is prescribed in a state of consultation with a doctor. There are contraindications when using plantain in cases of increased secretory function of the gastric glands ( hyperacid gastritis), peptic ulcer, Crown vascular insufficiency, increased blood clotting, attacks of bronchial asthma, therefore it is not used in diseases. Preparations based on plantain and its leaves (juice) have a bacteriostatic effect, pathogenic microbes of wound infections, hemolytic streptococci and staphylococci, pseudomonas aeruginosa, proteus (Proteus Rod), E. Stops the growth and development of Coli (intestinal stick). Under the influence of freshly prepared juice of plantain, the surface of the wounds is cleaned faster than pus, stopping the inflammatory process. Alternatively, preparations made on the basis of plantain leaves are included in the composition of anti-inflammatory, sleep-inducing, analgesic, anti-allergic remedies in medicine.

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