

THE BENEFITS OF THE MOST IMPORTANT MEDICINAL PLANTS FOR HUMANS IN STRENGTHENING THEIR IMMUNE SYSTEM

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Abstract. *On the basis of decrees of the President of Uzbekistan PD- No.3968 dated October 12, 2018 “On measures to regulate the field of folk medicine in the Republic of Uzbekistan”, PD-5707 dated April 10, 2019 “On measures to further develop the pharmaceutical industry of the republic in 2019-2021” - in strengthening the immune system, a special and group type of immunity is found in plants. In specific immunity, plants show resistance to a biotype or race belonging to a species of pathogens, and in group immunity, resistance to several races or species of them.*

Keywords: *enzymes, antioxidants, plant hormones, salicylic acid and salt, polysaccharides, amino acids, glycosides, vitamins V: 1,2, 6,12, A, C, E, PP vitamins, saponins, alkaloids, casting, eczema, psoriasis, UF- radiation.*

Introduction. The manifestation of immunity often depends on the enzyme system of the host-plant, the effect of phytoncides, phytoalexins, the stability of oxidation energy exchange, the amount of some chemical compounds, as well as the specific morphological structure of the plant. The mechanism of protection of plants against pathogens is their hypersensitive reaction. The basis of this feature in plants is that infected cells die quickly and pathogens cannot spread in them. There is no single theory about the diversity of pathogens and plant defense mechanisms. The ability of plants to produce antibodies against antigens has not been proven either.

Special and group types of immunity are found in plants. In Specific Immunity, plants show tolerance to a biotype or race of pathogens, and in herd immunity, they show resistance to several races or types of pathogens. Medicinal plants such as aloe, astragalus, echinacea, black elderberry, ginseng, licorice, gazanda, and St. John's wort are important for strengthening the immune system.

1. Aloe medicinal plant is one of the oldest medicinal plants.



Medicinal properties of aloe medicinal plant are determined by the content of many substances that activate the recovery processes in the human body. As a result of the scientists' research, they found that it contains enzymes, antioxidants, plant hormones, salicylic acid and salt, polysaccharides, amino acids, glycosides, and vitamins B: 1,2, 6,12. In addition, there are vitamins A, C, E, PP and essential oils. It can be grown and stored at home or purchased from specialty stores. Aloe plant has a certificate of the International Scientific Council, Ibn Sina carried out many experiments. Aloe juice contains more than 200 active components, including micro- and macroelements, vitamins, enzymes and amino acids, which are important for improving the human immune system. Aloe juice is obtained from the home-grown type of the plant.

Aloe juice has the property of quick healing of the affected area and is also an anti-microbial agent. Also, aloe effectively helps in the treatment of conjunctivitis and other inflammations. Aloe juice and ointment treat acute and chronic diseases of the skin. Eliminates wounds, injuries and burns and restores the skin to its original state.

2. **Astragalus** medicinal plant strengthens the immune system in humans.



Astragalus (Astragalus) is a member of the leguminous family and consists of grasses, shrubs, and sometimes shrubs. There are 1600 types. 592 species grow in Central Asia and 250 in Uzbekistan. This plant is harvested mainly for its root because it has many medicinal properties. Astragalus medicinal plant is used by making tea from its flowers and leaves and adding it to liquid food. You can also buy this herb in capsule, extract and powder form. Astragalus strengthens the immune system and helps fight flu. It is used in the treatment of ischemic heart diseases, alleviating allergic diseases, increasing the energy level, strengthening the nervous system, and the immune system.

3. Echinacea is used to treat colds, flu and other infectious diseases.



This plant has long been used to treat colds at home. If you gargle with it in angina, an effective result is achieved. According to some reports, echinacea has also been used in the treatment of respiratory tracts. This herb has also been used in the treatment of skin diseases such as wounds, casts, eczema, psoriasis, UV radiation, herpes simplex virus, and bee stings. The homeland of this magical flower is North America. From ancient times, the Indians knew how healing echinacea is, and applied compresses from its roots to wounds, insect and snake bites. They boiled this herb, washed their eyes, cleaned burned areas, and used the tincture for toothache and gum inflammation. Since its composition is rich in substances such as essential oils, glycosides, saponins, polysaccharides, and alkaloids, echinacea can't stop much in raising immunity. It has a bacteriostatic, anti-inflammatory, soothing effect: it helps with colds, flu, ear infections, bladder diseases.

Normalizes the activity of the nervous system: helps with depression, mental and physical stress. Increases the ability of cells to resist the attack of pathogenic microorganisms.

4. Medical plant Sambucus



Sambucus -various tinctures are made from the fruit. To improve the immune system of young children, to treat cough, to treat diabetes, to prevent cancer, it is rich in vitamins, it is widely

used in the food industry, especially in the preparation of kvass, in the preparation of molasses, and in folk medicine. This medicinal plant is used in the preparation of decoction, tincture, and tea. It contains ascorbic acid, caratinoids, essential oils, aldehydes, various alkaloids, i.e. sambunigrin. Sambucus plus is used for colds, ear diseases, bronchitis, tracheitis, flu, kidney and bladder diseases, diarrhea, various oncological diseases, neuralgia, mastopathy, rheumatism, gout, arthritis, hemorrhoids, burns.

4. Ginseng medicinal plant.



Ginseng (*Panax ginseng*) — A perennial herb belonging to the Araliceae family. An ancient plant that grows naturally in East Asia, China and Korea. It has been known as a medicinal plant since ancient times (medicines taken from its roots increase the body's strength). It is grown in a botanical garden in Uzbekistan. A number of useful chemicals contained in the composition have been widely used in folk medicine for the treatment of various diseases since ancient times. The root of the plant contains alkaloids, various juices, vitamin C, sulfur and phosphorus, aromatic substances, as well as micro- and macroelements. The plant has a calming and pain-relieving effect on the human body. Ginseng increases the ability to work in a person, improves gas exchange in the lungs. As a result of the healing effect of ginseng, a person's arterial blood pressure is normalized, the work of the endocrine system increases, and the amount of sugar in the blood decreases. Ginseng has a calming effect on nervousness, tension and anxiety. The plant is consumed during mental and physical stress.

Ginseng improves blood formation and memory, normalizes metabolism and cardiovascular system. Ginseng prevents premature aging of the body and does not have any other negative effects on the body.

This plant strengthens the immune system, helps to dissolve excess fat in the body. In folk medicine, ginseng is consumed as tincture, decoction, ointment, tea, and when dry. Regular

consumption of the tincture helps in the treatment of diabetes, tropical wounds, neuropsychiatric diseases, as well as relief from constant fatigue, nervousness, tension and anxiety.

6. Licorice medical plant.



Licorice (*Glerrhizza glabra*) a perennial plant belonging to the family of sedges. It grows mainly on mountain slopes, groves, riverbanks, stream banks, salty and sandy lands, sometimes among crops. Licorice is naturally distributed mainly in Central Asia. It grows in many parts of our country. It also grows naturally in the orchards around the shrine of "Termiz ota" and in the fields of the Tashdau farm experimental area. It contains useful medicinal substances that treat various diseases.

In particular, there is a large amount of Licorice substance with a sweet taste, essential oils, 27 types of flavonoids, glucose, sugar, starch, ascorbic acid, protein and other useful substances.

Licorice has been found to normalize the amount of water and salt in the body, protect against colds, treat various allergic and skin diseases such as itching, scabies, and urticaria (the process of swelling of the whole body when eating strong fatty food). Juices made from the root have an expectorant, pain-relieving and soothing effect on inflammation of the respiratory tract.

In medicine, decoctions made from the root are used as a diaphoretic, mild expectorant, and in the treatment of shortness of breath, cough, stomach and duodenal ulcers. That's probably why many people consume the tincture of the root of the plant. Licorice has medicinal properties such as refreshing, rejuvenating and normalizing eyesight. After 20-30 minutes after eating nutritious and high-quality food, after drinking the tincture 2 or 3 times a day for a month, its beneficial properties will be manifested. In this regard, in my observations. Licorice grows naturally in many places of Tashkent region, Kibray district.

7. Nettle-medical plant



Nettle medicinal plant used in folk medicine since ancient times. It grows in the mountainous areas of almost all regions of Uzbekistan, on dry land near water, on roadsides, near populated areas, in bushes, around houses. Gazand is perennial, its leaves are picked by hand. The harvested leaves are dried in the shade. The plant contains carotene, vitamins C, K, B2, panthothenic and formic acids, urticin glycoside, histamine, chlorophyll, starch, flavoring and other substances. Abu Ali ibn Sina used the fruit of the ghazanda plant to treat shortness of breath, and the leaf as an anti-hemorrhagic medicine. In folk medicine, tincture or decoction and powder made from plant leaves are used in the treatment of chest pain, stomach, fever, shortness of breath, hemorrhoids, as well as expectorant, diuretic, and hemostatic drug.

In scientific medicine, medicinal preparations of the gazanda plant, tincture, liquid extract are used as a medicine to stop bleeding from the lungs, kidneys, intestines, cystitis, menstrual disorders, uterine bleeding) and to treat chronic wounds, diseases caused by a lack of vitamins (avitaminosis). The leaves of the gazanda plant are included in tea preparations used for stomach ailments and as a blood-stopping medicine.

8. St. John's wort-medical plant



St. John's wort (Hypericaceae) a wild perennial herb - collected and dried herb of *Hypericum* L. during flowering. It contains flavonoids, essential oil, vitamins, resins, sugars, dyes

and additives. Abu Ali ibn Sina used the field plant as a pain reliever, diuretic and to treat various wounds. In folk medicine, a tincture prepared from field species is used in the treatment of kidney, bladder, stomach-intestinal (diarrhea) diseases. In addition to these, herbal tincture is used as a hemostatic drug (for bleeding from internal organs or spitting up blood). A fresh leaf is chopped, crushed and applied to the wound. To prepare a tincture from the field species, pour a glass of boiling water into a container with a closed mouth, add 10 grams of the ground upper part of the plant and infuse it. Then it is washed in gauze. The infusion is drunk 2-4 times a day after meals in a tablespoon.

In scientific medicine, medicinal preparations of the field plant (tincture, detox, liquid extract) are used in the treatment of diseases of the stomach and intestines (colitis, diarrhea), oral cavity (gingivitis, stomatitis) and burns of the II and III degrees. It is recommended to use tincture and tincture made from the above-ground part of the plant as a diuretic and anthelmintic medicine.

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