

Growing Medicinal Plants

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Abstract:

In our country, in recent years, great importance has been attached to the development of medicinal and spice plants, in particular, the effective and productive use of Natural Resources. In particular, the decree of the president of the Republic of Uzbekistan dated April 10, 2020 PQ-4670 "on measures for the development of wild-growing medicinal plants, cultivation, processing and rational use of available resources" laid the legal foundations for the radical development of the industry. As a result of the implementation of the tasks in this decision, the number of farmers and entrepreneurs engaged in the organization of not only the harvesting of medicinal plants in the wild in nature, but also the reproduction and processing of cultivated plants in the plantation method is growing significantly.

Keywords: Medicinal plants, Lycium, Angelica, Pinellia, Hydroponics plant.

Currently, in medicine, 250 medicinal herbal products are used. 48% of the products of the same medicinal plants are selected from plants that grow in the wild, 30% are selected in fields where medicinal plants of the community and state farms are grown - on plantations. The remaining 22% form a "mixed" group. That is, this group of medicinal plant products is collected from plants grown on Raw plantations, growing on raw wild Hal. It is expected that the Salm of medicinal products, which are then made from "mixed" rice medicinal herbs, will increase from the total amount of medicinal products collected year after year. If in the period 1975-1980 (that is, in 5 years) the amount of products made from medicinal herbs growing in wild Khol increased by 6.4%, in the same indicated years the mix of medicinal products collected from community and state Khojaly plantations grew by 35%. So, from year to year, the yield of growing medicinal plants on plantations is growing. For what reasons, the variety of medicinal plants grown increases in the amount of products that are prepared in general every year. There are many reasons for this, the main ones are as follows: 1) the amount of their preparation is reduced as a result of the extensibility of growing medicinal plant products from year to year. This leads to the fact that in turn, a number of medicinal plants are reduced to the place where the MiG kup grows, resulting in a sharp limitation or complete cessation of their preparation. As a result of the kup preparation of the ground kismi and onion of the buzulbang and korakovuks, which were used in wild Khol in Uzbekistan, their reserve (mikdori) was greatly reduced in the place of natural osish. Therefore, at the present time, these plants were included in the "Red Book" of Uzbekistan, their preparation at the place of natural growth was touched, and in the fields of the collective Khojaly they are grown in places where they grow in wild Khol. Examples of this kind can be found in couplets. 2) the increase in demand for medicinal plant products on a regular basis and its non-satisfaction with the high content of plants growing in a wild state. As a result, these plants are born to be grown on plantations. 3) Sometimes, when

there is a high demand for rare medicinal plants, but they are uncomfortable to collect in a wild hole, grow in mountainous areas (for example, belladonna and skulls growing in the mountainous districts of the Caucasus and Crimea) or in small quantities, in a scattered hole in a large God (for example, medicinal valeriana and skulls, common in Therefore, such plants are grown on Raw plantations. 4) the difficulty of preparing medicinal plants growing in wild Khol in large khajm, the complexity of using the village Khojaly technique for its collection. Over the past period, 9 clusters of growing medicinal plants have been established, by which chamomile, Poplar, lemonade, pepper mint, licorice, saffron and other medicinal plants are grown. As a result of their activities, in the past 2021, raw materials and processed products of medicinal plants worth US \$ 1.7 million were exported to 4 foreign countries. Today, as a result of increased attention to the field and the rational use of available opportunities, more than 100 types of medicinal plants are allowed to be used in official Medicine in the Republic, the main part of these medicinal plants being those that grow naturally. The reserve of raw materials of medicinal plants growing in this natural case is limited, the protection of which, the study of bioecological properties, the development of scientifically based methods for the correct use and reproduction of raw materials Reserve is one of the pressing problems. Therefore, the needs of the pharmaceutical industry in Uzbekistan are to provide raw materials for medicinal plants, enrich the local flora with new introduct plant species and develop technologies for their cultivation. In particular, at the beginning of 2020, all regions of the Republic had 27 types of plantations of medicinal plants on a total of 11.5 thousand hectares of land, while during 2021, plantations of medicinal plants were increased by 162 entities to 15.8 thousand, 17.3 thousand tons of raw materials of 45 types of medicinal and spice plants, which are in demand in domestic and foreign markets. Together with the expansion of cultural plantations of medicinal plants and an increase in production volumes, the export potential of the industry is enhanced. At the end of 2020, more than 16.0 thousand tons of medicinal plant raw materials and processed products worth US \$ 50.0 million were exported to 29 foreign countries, while at the end of 2021 there was an increase in this indicator, exports of products worth US \$ 55 million to 37 countries of the world. The increase in export geography at the expense of the United States and European countries is a sign that the industry has a great opportunity. As such, the establishment of primary seeding and the establishment of maternal nurseries to create cultural plantations of actively used medicinal plants is the root of the industry, and today 22 types of medicinal and spice plants are grown by 16 entities, seeds and seedlings. It is worth saying that with the development of the industry, the interest and consumption of natural medicines by the population increases and awareness increases. Increasing the work in this regard, it is necessary not only to increase the consumer culture of the population, but also to engage in the cultivation of medicinal plants in their own plantations, to increase the income of the population, to increase self-employment by planting medicinal plants in cooperation with clusters and Exporters on the principle of “one neighborhood – one product”, primary. Saffron, a plant known as the “Sultan of spices”, which is considered a valuable raw material for the food, pharmaceutical and perfumery Industries, one of such plants, both medicinal and seasoning, is today the most expensive plant in the world. Saffron is grown in large plantations in the Mediterranean, Middle East, Central and South Asian states, including Iran, India, Turkey, Greece, Italy, Pakistan, the United States, Azerbaijan, Russia, as well as in the regions of Uzbekistan today. This plant is a perennial herbaceous plant, reaching a height of 10-30 cm, the roots are 2-3 cm, the leaves are erect, large-shaped in appearance, the flowers are arranged in a dense cluster. On the plant, ball leaves appear 10-15 days before the flowering period. The flowers of saffron are large, pink in color and bloom in late October and the first half of November. Inside the petals, the pollinators – red, the seeders-are orange. It is propagated by vegetative method (through bulbs) due to its lack of seed production. The saffron plant can be harvested from 2 kg per hectare in the first year of planting, 4 kg in the second year, and up to 6-8 kg of saffron flower raw materials from the third year. To prepare a kilogram of dried saffron flower raw materials, more than 150 thousand flowers must be picked. An average of 7 mg of dried spice is obtained from 1 saffron flower. At the initiative of the president of the Republic of Uzbekistan, a joint venture “BMB Opera

Zafferano” LLC was established in the Bakhmal District of the Jizzakh region in cooperation with the Italian state in order to introduce saffron plant in the Republic in large areas, increase plant plantations, grow, attract foreign investment in the industry and increase export potential and employ women. The widespread popularity of this single plant, an increase in demand for the types of healing products for the health of the population during the pandemic, as can be seen from the high source of income for agricultural producers during the water deficit, the field of medicinal plants is one of the promising areas in the Republic with a large natural reserve that is no longer developing, unprecedented, and it is a time requirement to develop this area again, to ensure the integration of Education, Science and production, Today, great attention is paid to the use of natural medicines, the culturing of medicinal plants and the reproduction of their raw materials. Medicinal plants (lat. *Plantae medicinalis*) is a plant that is used in folk medicine, medicine or veterinary practice, for prophylaxis and treatment purposes. According to the International Union for conservation of Nature (IUCN), about 21,000 medicinal plants are used in medicine.

The annual turnover of medicinal plants is 3.26 million. dollars. China, India, Germany are among the leading countries in the export of medicinal plants.



The ovoid zbuturum (lat. *Plantago ovata*) is a plant in the family Zbuturumdushes (Plantaginaceae). The ovoid zbuturum grows wild in the Mediterranean Sea, The Canary Islands, India, Iran, Afghanistan, Pakistan and culturally in the United States. The seeds of the plant are used as an emollient in spastic and atonic constipation and in chronic colitis, colds and diarrhea, in the diet of patients with metabolic syndrome.



The order Chingil (*Lycium*) contains 88 species, in the family Ituzumdashlar (Solanaceae). Distributed everywhere, even in subtropical zones. Settles on dry land, sometimes found on saline soils. Ordinary chingil (*Lycium barbarum*) is not poisonous, the fruit is dried. In Chinese medicine, dry fruits (lat. *Fructus Lycii*) is used in dizziness, amblyopia, and as a general Energizer. The fruit is an immunostimulant, used in diabetes mellitus as well as for weight loss, improves metabolism, slows down skin aging.



Angelica or Arharoth (lat. Angelica is a moth in the family Ziradoshae (Apiaceae). Many species have coumarin and additives at the root. Some species are used as medicinal. In China, arharoth is known as "women's ginseng", "women's plant", and "Queen of Chinese plants". In women, it helps to restore the harmonic balance during the climacteric and puberty periods. The Chinese Maple has cardioprotective effect. Arharot normalizes blood circulation, prevents the formation of thrombi in blood vessels. The biologically active polysaccharides contained in arharote prevent the formation of ulcers in the stomach and duodenum and protect the liver from toxins.



Pinellia (Pinellia) is a perennial herbaceous plant in the family Aroidoshae (Araceae). The rhizome and stem of pinellia are used for coughing, nausea, dizziness and as a fever dropper and sweating agent. The plant improves the functioning of the spleen. When used to boil the plant with tangerine peel and ginger root, it has a high effect on coughing, phlegm transplanting, nausea. Herbal extracts are used as fever drops, anti-colds, sedatives, pain relievers. It is used in hypertensive diseases and infectious hepatitis, cholecystitis, cirrhosis of the liver, gallstone diseases.

One new method of growing plants is hydroponics, a technology for growing plants without the use of soil. From various nourishing chemical materials to grow plants as hydropones used. In a hydroponic system, the feed mixture can be added in different ways. Watering –one of the widely used methods of drip irrigation. Also spray, water leakage the corridor and the base of the tumor can be used in irrigation and other systems. Materials used in the growth of plant roots and bandini in the hydroponic system: Peat, ceramzite, perlite and xb. The substrate is placed in a plastic bag. Plastic under the greenhouse laying container, glass cotton, methane, polyethylene film . I have high water when watering rinse (dropper, sprayers) or the mixture is given from below (watering from the bottom, water from the corridors). The advantage of the hydroponics method is that obtaining a high-quality plant, that is , healthy growth of plants and the development of the ildi system without a pest, a good path of healthy banded, vegetative growth, allows light software management of the plant and obtaining a programmatic harvest. Hydroponics plant growth is real and natural. For normal growth, plants need simple, natural things. Hydroponics needs all the needs of the plant provides in quantity and on time. Hydroponics is something unusual in the chemical composition of a nutrient solution that is

given to the roots of plants that do not have genetic mutations in plants there are no legendary “stroids” in the use of hydroponics. In the production of pure nutrient solutions, it has now become possible to grow complete organic products using hydroponics.

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