"TECHNOLOGY OF CULTIVATION AND CULTIVATION OF MEDICINAL PLANTS IN THE EXAMPLE OF BRITTLE"

Salohiddinova Maftuna Kholmamat qizi
Termez State University, Faculty of Natural Sciences,
2nd year master's degree in biology
+998912382313
sirojiddintemirov684@gmail.com

Annotation:

Creation of a unified database of scientific research on the cultivation and processing of medicinal plants in the country, the study of advanced scientific developments of foreign countries, cooperation with leading scientific institutions and the introduction of modern technologies, scientific developments in the country

Key words:

Medicinal plants, Ministry of Health, alkaloids, various glycosides, Red Data Book of Uzbekistan, Ibn Sino

With the development of technological processes, medicinal plants have become widespread in pharmacology. On the basis of herbs, tablets and ointments are made, powders that are used in the treatment process. Growing herbs has become one of the areas of activity for a number of foreign pharmaceutical companies. The demand for herbal treatment is increasing with enviable consistency, and the old system of procurement of medicinal herbs has been practically completely destroyed, and the new one has not yet been created. This, in turn, creates a shortage and increases the cost of medicinal herbs. In this article, we will consider the cultivation of medicinal herbs as a business, which herbs are the most popular and the process itself and x cultivation. And so, you own a land plot or you rented it and decided to grow and sell medicinal herbs. Among all the variety of medicinal plants, the most popular are the raw materials of St. for gloves, hop and henbane inflorescences, aconite tubers and fern rhizomes, hemlock and flax seeds. The requirements that must be met for the cultivation of medicinal plants are identical to those for all crops. For each type of plant, it is necessary to take into account weather and climatic conditions, humidity and temperature drops, etc. Especially all this must be taken into account when growing medicinal plants brought from other regions or states. Despite this, there are plants that do not requiretons of special knowledge and the use of certain agrotechnical techniques, as well as special care.

If you decide to set up a small medicinal plant farm, it is best to choose crops that have the same way of growing, harvesting and processing. In this case, you can avoid unnecessary financial costs for the purchase of various equipment, speaking of a mini-farm, it will not require any special cash costs. At the same time, as practice shows, the profitability of the business of growing medicinal herbs reaches 150 percent. For a start, it is enough to have eat their disposal a small plot of land and a well-ventilated room where the seeds and the harvested crop will be stored. Equipment must be purchased based on the direction of the farm. For example, if you decide to grow and sell essential oil medicinal plants such as sage or mint, lavender, then you will need to purchase special equipment for oil extraction. If you plan to grow plants such as licorice or valerian, chicory, in which the root is used as a medicinal raw material, then you need a washing machine. If in the future you plan to expand your business, increase production volumes, then you need to pay special attention to the premises where you will store raw materials in the future, because state and international

standards are applied to the quality of medicinal plants. The state fully controls any company whose field of activity is the cultivation of raw materials and production medicines. Such companies are subject to mandatory certification. The certificate is issued in Russia by the Ministry of Health. During the certification procedure, specialists check the conditions for growing medicinal plants and their storage. The main criteria here are efficiency and safety. You can find out about all the requirements imposed on such farms by health care from the department itself. Below, for example, we give the technology of growing two x popular types of medicinal plants that do not require special care.

A brief history of medicinal plants and their growth

Herbs for the treatment of humans and animals, prevention of diseases. There are 10-12 species of medicinal plants in the world. The chemical, pharmacological and medicinal properties of more than 1,000 plant species have been studied. There are 577 species of medicinal plants in Uzbekistan. Of these, 250 species are currently used in scientific medicine. The effect of a medicinal plant on the body depends on the amount of compounds in the plant. These compounds accumulate in different amounts in different parts of the plant. The necessary parts of the plant are collected at different times for the preparation of medicines. For example, the bark, buds are removed in early spring, before or after flowering, when the flowers are fully open, the fruits and seeds are ripe, and the underground organs (roots, rhizomes, and bulbs) are removed in early spring or late fall.

The active substances of medicinal plants are alkaloids, various glycosides (anthroglycosides, cardiac glycosides, saponins, etc.), flavonoids, coumarins, astringents and other mucous substances. May contain essential oils, vitamins, resins and other compounds. Many plants produce antibiotics and phytonutrients that kill microorganisms and viruses. Typically, closely related chemical compounds in a group occur in the same family or group, but some chemical compounds may also be present in plants belonging to different families that are not close to each other. From time immemorial, wild plants have been used by humans to treat various ailments. Nowadays, the variety of medicinal plants has increased, and folk medicine has enriched it with medicinal plants. Many of the medicinal plants used in scientific medicine are derived from plants that have been used by humans for centuries. Medicinal plants used in folk medicine cannot be used in scientific medicine. 0 'More medicinal plants in Uzbekistan, bitter gourd, almond, medicinal cauliflower, walnut, jag-jag, zubturum, incense, itigek, omanqora, pistachio tree, sachratqi, chayot, shildirbosh, shirinmiya, wormwood, beetroot, beetroot, sorghum, and others. The alkaloids paxicarnin, incense garmin from incense, anabasine from feverfew, galantamine from ammonia, and spherophysin from thyme are obtained. Pomegranate peel is used to make wormwood pelterin tanat and extract. Medicinal herbs are used as expectorants and emollients, jaw and lagoxilus are used to stop bleeding, pistachios and tea are used to treat gastrointestinal diseases.

What is the reason that the production of medicinal plants grown on irrigated lands exceeds the total production of agricultural products every year? There are many reasons for this, the main ones being: As the demand for medicinal plant products grows every year, so does the production of their raw materials. This, in turn, leads to a decrease in the number of remaining medicinal plants in the growing area, resulting in a sharp restriction or complete cessation of the preparation of their raw materials. Due to the large-scale production of wild onions and blackcurrants in Uzbekistan, the stock of ulama has significantly decreased in the area of natural growth. That is why these plants are now included in the Red Data Book of Uzbekistan. As a result, their natural raw materials have been discontinued on-site and are being grown in farm fields as well as in areas where they grow wild. There are many such examples. 2. As a result of the constant increase in demand for medicinal plant products and their unsatisfaction at the expense of wild-growing plants, these plants have to be grown in irrigated areas. 3. Sometimes the demand for rare medicinal plants is high, but they are

found in the wild, in places inconvenient to collect (for example, belladonna, etc., growing in the mountainous regions of the Caucasus and Crimea) or in small quantities. if grown in large areas in a scattered manner (e.g., a common but rare medicinal valerian in the European part of Russia, etc.), the preparation of this medicinal plant product is more expensive than growing it on irrigated lands. Therefore, it is advisable to grow such plants in the fields of farms. 4. The difficulty of preparing large quantities of raw materials for wild-growing medicinal plants, the complexity of using agricultural machinery to harvest them. Medicinal plants grown on plantations can be harvested under favorable conditions and during periods of high concentration of effective chemical and biologically active substances using various mechanisms. 5. If the expensive medicinal product, which is very important for medicine, is made from plants that grow in countries with tropical or subtropical climates, which are not found in our country, it is advisable to grow this plant in our country, if possible. The agro-techniques of the newly planted medicinal plants are being developed at VILR and its experimental stations, in part in the botanical gardens of the Academy of Sciences (FA), universities and colleges. VILR and its experimental stations have made great strides in this area, developing agro-technical rules for the cultivation of a number of imported tropical and subtropical medicinal plants in the climate of the former Soviet Union. Of our countryThe following medicinal plants are grown on farms located in different regions: henna tree, coca bush, aloe species, orthosifbn, dichroa, big kella, sano (cassia) species, Mexican bangidevona, kalanchoe species, shy mimosa, to 'q red passiflora, rauvolfia species, pink catarantus (boriguI), round-leaved Stephanie, eucalyptus species, segmented ituzum and others. Medicinal plants grown in cultivated areas are very different from wild-grown medicinal plants, i.e., there is a mixture of foreign plants in the medicinal plant product grown. Medicinal plants grown on the basis of agro-technical rules are rich in nutrients and biologically active substances. It is possible to increase the yield of a medicinal plant and the amount of biologically active chemical compounds in it by selecting high-yielding varieties of medicinal plants, crossbreeding or obtaining polyploid (increasing the number of chromosomes). For the reasons mentioned above, growing some medicinal plants and preparing their products is much more economical than harvesting wild-growing medicinal plants. In Uzbekistan, medicinal plants are grown mainly on farms of the Ministry of Agriculture and Water Resources located in different soil climatic zones. For the first time in the Republic of Uzbekistan in 1973, farms in Bostanlyk district of Tashkent region began to grow medicinal plants. Later (1978) in Ibn district of Namangan region the farm of medicinal plants named after Ibn Sino was established. These fields are planted with peppermint, medicinal marmalade, medicinal cloves, namatak, bitter wormwood (Armenian), buckthorn, small-flowered turmeric and other plants. The products collected from them () were sent to supply pharmacies in Uzbekistan, as well as to the Shymkent Chemical-Pharmaceutical Plant and other enterprises. Currently, special farms for growing medicinal plants have been established in Bukhara, Kashkadarya, Samarkand, Surkhandarya and Tashkent regions. Pharmaceutical production associations in almost all regions of the country have established sites for growing medicinal plants they grow the appropriate plant at the request of the regional pharmacies. At present, in the fields of the farm named after Akhunboboev, which specializes in medicinal plants in the middle Chirchik district of Tashkent region, pepper mint, medicinal marmara (mavrak), medicinal thyme, medicinal chamomile, five-piece ituzum - lion's tail, pol-pola, na ' matak and other medicinal plants are grown.

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