

ECOLOGICAL CHARACTERISTICS OF MEDICINAL PLANTS AND METHODS OF THEIR CULTIVATION

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Abstract: *This article reveals the essence of growing medicinal plants given At the same time, this article is medicinal in agriculture improvement of the economic basis of plant cultivation proposal aimed at improving the theoretical, legal and methodological foundations and recommendations are given.*

Key words: *medicinal plants, efficacy, economic basis, legal basis, methodological basis, innovation*

INTRODUCTION

In ancient times, due to the insufficient level of knowledge of people, they considered the medicinal power of plants to be magical, miraculous. It was believed that there are herbs that can find hidden treasures, take away unconsciousness, and make the unloved love. Many legends have been woven about the human-like ginseng root. It was considered a miracle that Mehriqiyah root can give strength to people who are weak and exhausted. With the passage of time, science has scientifically proven how a particular plant can be used as a cure. With the emergence of a special class of doctors and pharmacists, knowledge about medicinal plants began to be formalized.

Literary sources indicate that medicinal plants were also used in Egypt, India and China before 3000 BC. By the Middle Ages, in Arab countries, Central Asia, Azerbaijan, Georgia, Armenia and European countries, medicinal plants were used against various diseases in various sources.

It is known that the population on earth is increasing year by year. From this point of view, it is appropriate to emphasize that ensuring food safety has become one of the main problems in all countries of the world. This problem is also relevant for the Republic of Uzbekistan, which is considered an agrarian country. In order to solve this problem, the President and our government have developed measures for

the rational use of natural resources, among other tasks, and they are being implemented consistently. Deep processing of plant raw materials with the Resolution of the President of the Republic of Uzbekistan Sh. Mirziyoev "On measures for the protection of medicinal plants growing in the wild, cultivated cultivation, processing and rational use of available resources" dated April 10, 2020 No. PQ-4670 (the task of accelerating scientific research on the creation and production of new types of pharmaceutical products through obtaining substances) [1].

The natural resources of our country are very rich, diverse and colorful. One such resource is wild medicinal plants. Currently, the use of wild medicinal plants in traditional medicine and folk medicine is expanding. Therefore, the collection of raw materials of medicinal plants by healers and similar strata of the population is also increasing. However, the period and standards required for collecting these raw materials are not observed in many cases, which in turn leads to a decrease in the resources of medicinal plants in our republic.

ANALYSIS OF LITERATURE ON THE TOPIC

In order to plan the rational and efficient use of medicinal plant resources, certain information about their condition and location is required. For this, it will be necessary to conduct many researches and studies. In this regard, the contributions of several researchers and scientists working in this field are incomparable. Today, the demand for raw materials of essential oils and medicinal plants in Russian enterprises is 2,500-3,500 tons for essential oils and more than 100,000 tons for medicinal plants [3].

V.A. Gushina, S.A. Kginikatkina, N.V. Nikolaychenko, I.A. Voronova, M.N. Khudenko, K.S. Pimenov, V.I. Norovyatkina and the research of others is devoted. Wild medicinal plants of the Zagatal region and Gubinsk massif of the Republic of Azerbaijan D.I. Isaev, Yu.B. Kerimov, N.P. Mekhtieva and others, biological characteristics of ontogenesis, essential oil content of species such as *Achillea* L. and their antifungal activity S.D .studied by Mustafaeva. In Dagestan, M.D. Dibirov, R.A. Murtazaliev, A.N. Alibagova described the biological properties and

distribution of medicinal herbs *Allium grande* (Alliaceae) in their scientific works. Ecological and biological description of some types of medicinal plants in the steppe region of the Republic of Bashkortostan. *aflatunense* B. Fedtsch) were studied by A.F. Agafonov, L.I. Gerasimova, T.M. Seredin [2].

G.F. Golovinov, N.B. Gulko, G.K. Gunko, S.A. Kuznetsov, P.G. Khabratlar on the cultivation of essential oil crops and clary sage in the Kuban and other regions, N. on the technology of cultivation of these plants in the Crimea S. Babanov, L.S. Memisheva, E.A. Merkusheva, S.A. Kuznetsov conducted research. Assessment of raw material reserves of *Dipsacus azuveus* (Dipsacaceae) from medicinal plants in the northern part of the Ola-Tog range of the Kyrgyz Republic was carried out by A.A. Akimaliev, N.J. Jumalieva, R.A. Kurmanov. A.P. Zabaluev assessed the resources of medicinal plants in Pugachyov district of Saratov region. Plant research in Central Asia began a long time ago. The Sultan of Medicine, Abu Ali ibn Sina, wrote his world-famous 5-volume "Laws of Medicine" ("Kitab al-qanun fit-tibb"), as well as "About the Sachratqi plant" ("Fil-hindubo"), "Medicinal remedies" ("Al-Adwiyat al-Qalbiya") mentioned that more than 1400 of the 2600 medicines listed in his works are prepared from medicinal plants. Scientific works of A.S.Yuldashev, M.I.Ikromov and V.A.Tileumuvatova are devoted to the distribution of medicinal plants in Uzbekistan, including Karakalpakstan, and their raw material reserves [4].

Currently, in Uzbekistan, the study of medicinal plants, identification of their stock, preparation, cultivation and planting and reproduction of species brought from foreign countries are being carried out on a very large scale, including the Tashkent Pharmaceutical Institute, Tashkent, Andijan, Samarkand, Bukhara Medical and Pedagogical, Agricultural and other institutes. , Tashkent, Samarkand and Nukus universities, as well as the chemistry of plant substances, Bio-organic, Botany and other scientific research institutes of the republican Academy of Sciences, as well as the relevant departments and laboratory staff of the Botanical Garden. In this regard, the services of the following distinguished scientists of Uzbekistan are significant: S.Yu.Yunusov, O.S.Sodikov, K.3.Zokirov, www.tadqiqotlar.uz

K.A.Abdumuzimov, P.Kh.Yuldoshev, N.K.Abubakirov, R.L.Khazanov , A. Ya. Butkov, I. I. Granitov, I. P. Tsukervanik, I. K. Komilov, N. S. Kelginboev, M. B. Sultonov and others.

RESEARCH METHOD

As a result of our research, the issues of clarifying the directions and prospects of state support for the cultivation and processing of medicinal plants in agriculture were studied, and scientific conclusions and proposals were developed for the wide development of the introduction of innovative technologies in the cultivation and processing of medicinal plants in the future. In the process of research, methods such as abstract thinking, logical approach, and comparative analysis were widely used.

ANALYSIS AND RESULTS

More than 100 plant raw materials have been approved for use in medical practice by local enterprises, and they belong to 28 pharmacotherapeutic groups. Preparation of herbal tinctures based on simple (from one type of plant raw materials) and complex (from two or more types of plant raw materials) recipes from plant raw materials and their use in medical practice is established. China (52.3%), Turkey (16.7%), Afghanistan (10.6%), South Korea (3.7 %), India (3.9%), Germany (1.5%) and other countries (11.3%) are exported. At the same time, the results of the analysis conducted in this regard show that the works being carried out on the protection of natural reserves of medicinal plants, their rational use, the establishment of plantations, the reproduction of competitive species in domestic and foreign markets, the creation of an additional value chain through primary and deep processing are behind the current requirements. showing that it remains [5].

Protection of medicinal plants in nature, creating a favorable agribusiness environment for the further development of cultivation and processing, strengthening the export potential of the industry, and implementing the integration of education, science and production are of great importance. In 2018, medicinal plants were grown on 54,600 hectares of land owned by farms and other organizations and enterprises across the country, and were directed to the domestic

and foreign markets. It is planned to increase medicinal plant plantations to 103,700 hectares in 2020-2023. But despite this, unfortunately, until today, we have almost stopped using natural medicinal plants. According to the data, only 2.3% of the 6400 types of drugs used in our country are natural drugs [6].

Naturally growing plants also have a limited supply of raw materials, and one of the urgent problems is to protect them, study their bioecological properties, properly use the raw material stock, and develop scientifically based methods of reproduction. Therefore, in Uzbekistan, it is necessary to supply the needs of the pharmaceutical industry with raw materials of medicinal plants, to enrich the local flora with new introduced plant species, and to develop technologies for their cultivation.

It is clear from this that the need for medicines made from plant raw materials is increasing day by day. This situation requires a wider use of medicinal plants. In this case, it is appropriate to perform the following tasks:

- participation in the formation of comprehensive development programs for the cultivation and processing of medicinal plants and their implementation coordination, conducting a unified scientific-technical, technological, investment and export policy in this field;
- establishing special plantations in favorable areas for the growth of medicinal plants, including gradually increasing the volume of their cultivation by introducing intensive cultivation technologies and rationally using natural growing areas;
- effective organization of mutual cooperation of business entities with state administration bodies, local state authorities of all levels within the framework of establishment of plantations, deep processing of medicinal plants on an industrial basis and production of exportable products with high added value;
- participation in the development of projects of regulatory legal documents related to the development of the field of cultivation and processing of medicinal plants, as well as implementation of environmental control of the public;
- coordinating the implementation of investment programs and projects in the field of cultivation and processing of medicinal plants;

- active involvement of foreign investments, foreign experts and consultants in the process of establishing new capacities for cultivation and processing of medicinal plants and development of existing ones, introduction of advanced technologies in this field;
- training and retraining of specialists for this field, effective organization and coordination of their professional development in higher and secondary specialized, vocational education institutions, as well as abroad.

CONCLUSION

To sum up, today the cultivation and processing of medicinal plants on a large scale is considered important not only for the improvement of public health, but also because of the high level of economic efficiency and good income.

To achieve this goal, it is advisable to follow the following recommendations:

- clarification of directions and prospects of state support for cultivation of medicinal plants in agriculture;
- study of development issues on the example of foreign experiences in the cultivation of medicinal plants;
- improving the economic basis of growing medicinal plants, improving the system of indicators representing the effectiveness of service activities in agriculture, their classification, identification and analysis based on the conditions of application of innovative processes in the field;
- in the future, problems of development of cultivation of medicinal plants in agriculture and problems of increasing sources of income, development of methods for determining internal possibilities for improvement of these indicators, etc.

REFERENCES

1. Ўзбекистон Республикаси Президенти Ш.Мирзиёевнинг “Ёввойи ҳолда ўсувчи доривор ўсимликларни муҳофаза қилиш, маданий ҳолда етиштириш, қайта ишлаш ва мавжуд ресурслардан оқилона фойдаланиш чора -тадбирлари тўғрисида”ги 2020 йил 10 апрелдаги ПҚ-4670- сонли Қарори

2. Эргашев Р.Х. Қишлоқ хўжалиги иқтисодиёти – (дарслик), - Т.: “Иқтисод молия” 2018, 402 б.
3. Uzoqjonova, M. (2024). EKOLOGIK MA'DANIYATNI YOSHLAR ONGIGA PEDAGOGIK METODLAR YORDAMIDA SINGDIRISH. Universal Xalqaro Ilmiy Jurnal, 1(4), 99–100. Retrieved from <https://universaljurnal.uz/index.php/jurnal/article/view/72>.
4. Uzokjonova, M. (2023). STEAM technology and the importance of gamification in it. Science and Education, 4(10), 365–368. Retrieved from <https://www.openscience.uz/index.php/sciedu/article/view/6361>.
5. Madaminjonovna M. M. et al. ECOLOGICAL-VALEOLOGICAL CULTURE IN THE" MAN-NATURE-SOCIETY" SYSTEM //Web of Teachers: Inderscience Research. – 2024. – Т. 2. – №. 5. – С. 51-55.
6. Uzoqjonova, M. (2023). Tabiiy fanlarni o'qitishda STEAM ta'limi tizimi. Science and Education, 4(9), 344–347. Retrieved from <https://www.openscience.uz/index.php/sciedu/article/view/6297>.