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Growing Barley and its Medicinal Properties

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Annotation: This article analyzes the cultivation of barley and its medicinal properties. Barley is a widespread and highly productive agricultural crop, which requires the introduction of new agricultural technologies and cultivation methods. The medicinal properties of barley are considered, as well as its use in folk medicine, especially for the treatment of diseases of the gastrointestinal tract, cardiovascular system and strengthening the immune system.

Keywords: barley, agro-technology, medicinal properties, ecology, economy, medicine, yield, agriculture, crop science, irrigation.

Agriculture is one of the main sectors of the economy of our Republic. The importance of grain crops, especially barley, in ensuring food security of the country is incomparable. Barley is widely used not only in the food industry, but also in animal husbandry, pharmaceuticals, and the production of environmentally friendly products. In 1930, 35 million hectares were sown on an area of ha, the total yield was 40.8 million tons, the yield was 1.1 t / ha, in 1950 38.8 million hectares, the total yield was 46.1 million tons, the yield was 1.2 t / ha, 61.7 million hectares in 2000, the gross harvest was 141.9 million hectares. tons, the yield was 2.3 t / ha, in 2016 46.9 million pieces were planted, the total harvest was 141.2 million pieces. tons, the yield was 3.01 t/ha, which means that barley is an important agricultural crop. In recent years, the modernization of barley cultivation technologies and the introduction of scientifically based agrotechnical methods have become an important task. The issues of maintaining soil fertility, rational use of water resources, and obtaining high-quality crops are among the pressing issues in barley cultivation.

Scientific research in the field of studying the medicinal properties of barley and its use in medicine is also gaining importance. The substances contained in barley are useful for strengthening immunity, restoring the gastrointestinal tract, and improving overall health.

Barley (Hordeum vulgare) is one of the oldest cereal crops in the world and is widely distributed in Uzbekistan. Barley does not require a large amount of water, so it can be successfully grown mainly in arid regions. Agrotechnical measures are important for the effectiveness of barley cultivation. There are some differences in barley planting technology and yield in different regions of Uzbekistan, which leads to different agrotechnical measures.

Proper soil preparation is of great importance in barley cultivation. Proper soil preparation can create favorable conditions for the plant to develop well. The most favorable soil for barley is a soil with average technical fertility, well-drained and enriched with organic matter. Before planting barley, the soil is well developed by deep plowing and harrowing. During soil preparation, agrotechnical measures are necessary, such as installing a drainage system and eliminating excess moisture. This is especially important for areas with an irrigation system in agriculture. When choosing barley varieties, the suitability of crops to climatic conditions, disease resistance, and the ability to produce high yields are taken into account. Selection work plays a significant role in choosing barley varieties. Today, high-yielding barley varieties selected in Uzbekistan are widely used. Also, barley seeds should be strong, resistant to pests, and able to successfully develop in various agrotechnical conditions in agriculture. It is important to choose the right time for sowing barley seeds. This process takes into account climatic and agrotechnical conditions. In many regions of Uzbekistan, barley is sown in the spring, in mid-March-April. Barley does not require large amounts of watering, but moderate watering is necessary for high yields. When watering a barley plant, it is necessary to choose the right time. Watering will help reduce excess water and maintain the optimal condition of the soil. The best watering regimen for barley is to correctly determine the time and amount of watering. In addition, fertilizing also plays an important role. Nitrogen, phosphorus and potassium fertilizers are necessary for barley crops. While nitrogen is needed by the plant for rapid development, phosphorus and potassium help to strengthen the root system and increase the quality of the crop. The best method of fertilizing barley crops is the correct application with microelements.

The exact time for harvesting barley depends on its maturity. If the harvest is delayed, the quality of the crop may decrease and the plant may be damaged. For harvesting barley, the equipment, especially combines, must work efficiently. When harvesting barley grain, it is necessary to harvest the entire crop, taking into account the upper and lower parts of the plants.

Barley is widely used not only in agriculture, but also in medicine. Barley has long been known for its medicinal properties. It contains nutrients, vitamins, minerals, proteins and fiber. These substances have a beneficial effect on the body and help fight various diseases. Barley is used in folk medicine to treat diseases of the gastrointestinal tract, against inflammation, and to improve the vascular system.

The beta-glucans, fiber and other nutrients contained in barley have a beneficial effect on the digestive and intestinal systems. Beta-glucans play an important role, especially in restoring the mucous membranes of the stomach and intestines. Barley improves the functioning of the gastrointestinal tract, and also cleanses the intestines, removes toxins and ensures the normal functioning of the stomach.

Magnesium, potassium and other minerals contained in barley are very beneficial for the heart and vascular system. These substances help to dilate blood vessels and reduce blood pressure.

The vitamins and minerals contained in barley strengthen the body's immunity. Barley is a natural immunostimulant, protecting the body against diseases, especially in cold weather. The vitamins C, E and minerals contained in it strengthen the body's defense mechanisms and help keep the body healthy for a long time.

Barley is also used in the bioenergy sector. It can be used to produce ethanol or other biofuels. This,

in turn, reduces the need for energy sources and is used to produce environmentally friendly energy resources.

Barley cultivation is important in the agricultural economy of Uzbekistan and the world. Barley, as a high-yielding crop, not only meets domestic needs, but also expands export opportunities. Barley cultivation creates jobs in countries and improves the economic situation of the population in rural areas. Barley products are useful in the national economy due to their nutritional value, and in animal husbandry due to the usefulness of barley grain feed for livestock.

In conclusion, barley cultivation plays an important role in agriculture, medicine, and bioenergy. At the same time, barley cultivation plays a significant role in ecological aspects, protecting the soil and ensuring sustainable agriculture. Barley is also an economically important crop, and its harvest is not only in demand in the domestic market, but its export also contributes to economic growth. Thus, barley is a plant of great importance not only for food, but also in the industrial, medical and ecological sectors. The development of barley cultivation and utilization strategies is important for the further development of agriculture.

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