



THE ROLE AND NUTRITIONAL BENEFITS OF SOY IN ADDRESSING PROTEIN DEFICIENCY

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Abstract: As a result of the continuous increase in the demand for protein, its price is increasing in the world market. Therefore, the production of plant and animal protein and providing the population is the main issue, and protein is becoming the most important strategic product. The main way to solve this problem is to introduce planting of protein-rich plants, including soybeans, on large areas and to include them in the structure of crop rotation.

Key words: Soy, protein, oil, artificial nutrition, yield.

According to the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization, more than 840 million people in the world do not have the opportunity to get enough food. This means almost one in eight people of the world. In addition, more than 30% of the world's population suffers from lack of the most basic proteins, trace elements and vitamins. Soybeans contain a large amount of protein and oil, and are also rich in minerals and vitamins. The most important feature of soybeans is that it provides more and cheaper protein from land than other plant and animal feed sources. Soybean protein is the protein most similar to animal protein and is very important from a biological point of view. Today, when there is a protein shortage all over the world, soy is unmatched among all plants in the agricultural system due to its versatility.



Although soybean is of high enough quality, today it is not widely used in agriculture in Uzbekistan. In this regard, "On measures to organize soybean planting and increase soybean planting in the Republic in 2017-2021" as well as rational use of land and water resources, strengthening of the livestock feed base, processing of JSC "Uzpakhtayog" taking into account the more effective use of the production capacities of the organizations, the implementation of the decision of the President of the Republic of Uzbekistan No. Testing new high-yielding varieties of foreign selection in different soil-climatic conditions of the republic's territories, establishing cooperation with selection and seed breeding scientific institutions of countries with a positive practice of sowing soybeans is being carried out. Soybean cultivation is one of the most economically efficient methods of agricultural production, as the production of vegetable oil is 5-7 times cheaper than that of animals. Plants are an integral part of agriculture and are of special importance in the national economy. Food products necessary for humans are obtained from the soybean plant. Through this indicator, one can think about the well-being of the country's population. In addition, plants are a source of raw materials for industry. There are many reasons why demand for soybeans has increased recently. First of all, its grain contains 50% protein, up to 28% oil, and is an important raw material in the food industry. In addition, soy has a great role in the development of industry, technology, and animal husbandry. It is widely used in the production of soap, lacquer, plastic, film, chemical and textile industries. The fact that it is a valuable food increases its importance. For example, shrot and kunjara are obtained from soybeans. The green stem is a nutritious fodder for livestock. So, more than 400 types of products are produced from soybeans. Among them, the most valuable is protein. While livestock accounts for 32% of the world's protein supply, the remaining 68% comes from plants, including 55% from soybeans. For this reason, soy is gaining great practical importance in eliminating protein deficiency. Today, it has become a leader in the production and export of soybeans, which are popular in the world market. Soybean crops are grown on an average of 33.3 million hectares annually in this country, and an average of 31.4 centners per hectare is harvested.



It should be said that the soybean plant does not choose a place according to its biological characteristics. It also grows in saline, cultivated fields with elevated groundwater levels. The main condition is to find a variety adapted to that environment. Also, it is very convenient to take care of it in a mixed way. The most important thing is that it "heals" the earth, collects up to 80-100 kilograms of pure nitrogen in the soil. In other words, it restores the power of the land used for another crop. That is why it is called "Soil Gold". Soybean is one of the most important sources in solving the main problem of today - protein deficiency. Because soy protein is similar to animal protein in terms of its chemical composition, all developed countries pay great attention to soy cultivation.

In conclusion, it can be said that soy is a waste-free plant. It is also possible to produce various products - construction boards, fabrics, artificial fertilizers - from the waste of soy that is not used in the food industry and animal husbandry. Soy, in turn, is considered a good predecessor for many plants. In particular, the productivity of corn, potato and potato crops planted after soybeans was high. For example, the yield of oats planted after soybeans was 4.5 centners higher. When seed was planted after sowing, cotton productivity increased to 2.7-3.3 centners per hectare.

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