

IMPORTANCE OF PEA PLANT IN IMPROVING SOIL FERTILITY AND MORPHOLOGICAL CHARACTERISTICS OF PEA PLANT

Turkistonova Maftuna,
Fergana State University
Teacher of the Department of Botany

Sodikova Maftuna
Fergana State University
Teacher of the Department of Botany

Abstract

In this article, we talked about the importance of pea crop rotation in increasing yield and increasing soil fertility. Currently, the importance of leguminous grain crops in increasing soil fertility is incomparable due to the low content of humus and nitrogen in the soils of dry areas in various regions of Uzbekistan. As a result of the increase in the amount of organic matter in the soil after leguminous crops, the water-physical properties of the soil are improved. Therefore, the demand for legumes is increasing day by day.

Keyword: humus and nitrogen, archaeological, morphological, drought.

It is known to us since ancient times that many scholars have given information about the healing properties of peas in their works. Among these, Abu Ali Ibn Sina spoke about it in his "Laws of Medicine" and explained that it has no equal in the nutrition of the lungs, the use of its oil against iron, bad wounds, itching, its boiled water is useful for toothaches, swellings in the property, it dissolves stones in the kidney and other such healing properties. reached In different countries, the pea plant has been used against various diseases, for example, in France and Great Britain, they found that it has a positive effect in the treatment of intestinal diseases, diarrhea, and urinary organs. Also, malic, citric and malic acids extracted from pods and leaves are widely used as medicine in Southeast Asian countries, India, China and Burma. Currently, the importance of leguminous grain crops in increasing soil fertility is incomparable due to the low content of humus and nitrogen in the soil of dry areas in various regions of Uzbekistan. After leguminous crops, the amount of organic matter in the soil increases, the water-physical properties of the soil improve. Their organic residues decompose quickly compared to those of cereal crops. It effectively protects the soil from wind and water erosion. In world agriculture, the demand for leguminous crops is increasing day by day, currently, 135 million ha of leguminous crops are planted. The area of legume crops is 10-11 to 20-25% of the total area of grain crops. In terms of cultivated area, soybeans, chickpeas, and green peas occupy the main positions. The demand for nutritious crops is increasing day by day due to the increasing population. In the decision of the Cabinet of Ministers No. 1025 of December 20, 2019 "On effective use of available land and water resources, rational placement of agricultural crops for the harvest of 2020 and forecast volumes of production", 199 thousand 111 hectares of the 777 thousand 634 hectares of areas that will be planted with repeated crops this year or 26 percent is planned to be planted with nutritious crops. Peas are one of the most common leguminous

crops in Uzbekistan. Various dishes are prepared from grain, especially soup, and it is often added to pilaf. Grains are boiled and cooked separately with meat, fried and eaten in the form of grains. White-grain varieties are grown for food, and black-grain varieties are grown for fodder. Our people use the grain for cooking nutritious liquid and thick dishes, as well as making sweets and canned products.

Chickpea - in order to use the land efficiently and provide livestock with nutritious feed, it is recommended to plant chickpea seeds from grain and leguminous crops in the period from July 15 to August 10 in the amount of 7 kilograms per 10 square meters. When entering the branching phase, it is fertilized and watered. Taking into account the air temperature and the condition of the crop, if it is fed once more and irrigated two to three times, it is possible to get 15-20 tons of blue pulp by October. Currently, all varieties of this species are divided into 2 groups according to their use: khoraki varieties - the grains of these varieties are light yellow in color and are mainly used for food products: Hashaki varieties - the grains are dark in color and are mainly used as fodder for cattle in animal husbandry. Different varieties of peas are grown in different countries. The Asian type of chickpea is very common in Uzbekistan, and this type of chickpea is one of the most widespread ancient crops in the world. The country of origin is South-West Asia (more precisely, between the countries of Greece and Iran) and Asia Minor. According to Decondol, it spread to India later. During archaeological excavations in Palestine, Israel, remains of peas dating back to the 4th millennium BC were found. Morphological and biological characteristics of peas are mainly taken into account when increasing productivity and creating new varieties of peas. For example, pea root consists of tap root and lateral roots, and the tap root penetrates to a depth of 1-1.5 m. Stem. The stem of the pea plant is jagged, erect, bushy and covered with fine colored hairs. The plant bush has branched, gypsum, semi-gypsum and pyramidal forms. Side branches are located at different angles. The leaves are complex in structure, oddly feathery, and consist of 11-17 small leaves. Flowers. Pea flowers are rather small and are placed singly in leaf axils. Fruits. The pods are oval, rhombic or convex in shape and covered with short colored hairs. Germination and flowering-ripening of peas takes place in several periods. Development periods can be divided into the following: 1) swelling, 2) sprouting, 3) stem branching, 4) tillering, 5) flowering, 6) formation of pods, 7) ripening, 8) full ripening. Each plant has a growing season, like a pea As with the growing period of the plant, the growing period of the pea plant can last 60-90 days, mainly depending on the characteristics of the variety, weather and growing conditions in dry lands. The requirements of the pea plant for abiotic and biotic factors are different, as well as for light and heat. Pea is a light-demanding, long-day plant. It belongs to the group of heat-loving plants, but its seeds begin to turn green at a temperature of +2 +5 C. Germination takes 20-30 days at this temperature. When the air temperature is +6-+8 C, the seeds germinate in 10 days. Grass can withstand -11-16 C cold. It is one of the most resistant plants in dry lands to drought and high temperature. Moisture requirement. Peas are among the most drought-resistant legumes. Plants grow well when the optimal soil moisture ChDNS is 60-75%. At present, several varieties of peas are grown in Uzbekistan, a vivid example of which is the variety "Uzbekistan-32". This variety is a variety created by the Gallaorol Research Institute of Cereals

and Legumes Scientific Research Station from the hybrids of Milyutin-4 x K-1062. It is considered one of the most common varieties.

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