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PISUM SATIVUM L. THE ROLE OF IN CROP ROTATION

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ABSTRACT

This article focuses on a number of features of Pisum sativum L. used as a secondary crop, its importance in agriculture, and its role in increasing productivity.

Keywords: *Crop rotation, protein, carotene, nitrogen, legumes.*

АННОТАЦИЯ

В этой статье основное внимание уделяется ряду характеристик Pisum sativum L., используемого в качестве вспомогательной культуры, его значению в сельском хозяйстве и его роли в повышении урожайности.

Ключевые слова: *Севооборот, белок, каротин, азот, бобовые.*

INTRODUCTION

The issues of rational and efficient use of land resources and soil fertility are becoming one of the most pressing issues. In agriculture, the proper use of irrigated, dry lands and pastures, the organization of land reclamation are important tasks. A number of agro-technical measures are being taken to address these issues. In particular, crop rotation has been introduced today.

The composition of arable land is the share of the area under certain types of crops in the total sown area. The composition of arable land is not only an agro-technical event, but also a major organizational and economic event. The structure of arable lands is based not only on the need to increase soil fertility, but also on the unconditional fulfillment of state plans and tasks on the types of products, the harmonization of industries in accordance with the purpose. Therefore, the main task of the rational structure of arable land is to achieve high productivity of crops, to fulfill the planned tasks for the sale of agricultural products, to produce the required amount of products to meet domestic needs and to ensure its high profitability. In agricultural enterprises, the system of crop rotation is established according to the demand of arable land.

DISCUSSION AND RESULTS

Crop rotation refers to the systematic rotation of crops in certain fields over the years. This definition is a narrow concept of crop rotation, which clearly states the

essence of agricultural technology. But crop rotation has a broad meaning and is the basis of the farming system, or in other words, the culture of farming. It includes both agro-technical and organizational-economic measures. Organizational and economic crop rotation is the main condition for the proper use of land, means of production and labor, the basis for the profitability of the enterprise. [4]

In order to get an effective harvest from the soil, crop rotation has been established in our country. Crop rotation is the scientifically based rotation of crops between fields and years. It is an effective measure to ensure soil fertility and increase crop yields. Crop rotation is the most important part of the farming system. Such rotation allows to control the amount of organic matter in the soil, to effectively control weeds, plant diseases and pests, to ensure the granular structure of the soil, to improve the nutrient and water-air balance, to increase the effectiveness of applied fertilizers. prevents soil erosion. It is advisable to use *Pisum sativum L.* plant as a secondary crop in improving soil structure

Pisum sativum L. is one of the most widely grown legumes for food and fodder purposes. The seeds contain 20-26% protein. The seeds ripen well and are digested. *Pisum sativum* is the main protein source in the production of compound feeds. One unit of food contains 120-185 g of digestible protein. Vegetable varieties are used in the canning industry. *Pisum sativum* is high in protein and carotene per hectare when planted in rotation and in combination with other crops. During the season, 80-120 kg of nitrogen is accumulated per hectare of arable land. [1].

Homeland - Old Asia, mountainous region of Turkmenistan, Iraq, Caucasus. The second homeland is the eastern shores of the Mediterranean. *Pisum sativum* is widely grown in Europe, Asia and America. Very plastic crop and therefore common. Currently, about 15 million hectares are cultivated in the world's agriculture. New varieties yield 4-5 tons of grain per hectare.

Pisum sativum is placed after fertilized good predecessors. In Uzbekistan, *Pisum sativum* is planted after cotton, potatoes, sugar beets, winter cereals and corn. *Pisum sativum.* The placement after sunflower is useless. Spilled seeds of sunflower germinate, making it difficult to harvest *Pisum sativum. Pisum sativum* can not be placed after perennial legumes (alfalfa, sebarga), cereals, cereals. Once *Pisum sativum* is planted, it can be replanted after 5-6 years. If it is returned to the planted area earlier than specified in the rotation, the root will be damaged by rot.

Peas enrich the soil with nitrogen and clear the field of weeds as a row crop. In irrigated as well as arable lands, *pisum* is a good predecessor for autumn grain crops. Bruxus is not affected by the beetle. Among legumes, the highest grain yield in arable

farming is 10-12 s / ha. In crop rotation 3: 6 (2: 4: 1: 2), 7: 3 (2: 4: 1: 3), 2: 8 (1 : 4: 1: 4) The grain is planted one year in the fields set aside for legumes. When *Pisum sativum* is planted in spring or autumn, the vacated areas are immediately plowed and planted for corn grain or silage, or for potatoes and other crops. [3]

In irrigated lands in Uzbekistan, as a rule, no special field is allocated for *Pisum sativum.* It is planted as a repeat crop in the fall after the autumn grain crops, the next year's vegetable harvest. *Pisum sativum* can also be planted between growing rows of cotton or after the cotton stalks have been harvested.

Pisum sativum is planted in irrigated lands in early spring, while the soil is plowed in autumn to a depth of 27-30 cm. In the spring, harrowing is carried out at SBTS-1,0R or milling to a depth of 8-10 cm to soften the surface of the moist soil. plowed, plowed and plowed.Cotton is cultivated between rows before sowing, then *Pisum sativum* seeds are sown. If sown in late autumn, the field is plowed, chiseled and plowed to a depth of 27-28 cm. Saline soils are washed with saline before planting *Pisum sativum*. [2]

Pisum sativum is effective in fertilization. It absorbs 4.5-6.0 kg of nitrogen, 1.7-2.0 kg of phosphorus and 3.5-4.0 kg of potassium to produce 1 s of grain and corresponding vegetative mass. The use of molybdenum and boron from trace elements gives good results. The effectiveness of 0 ‘gits depends on soil-climatic conditions, moisture content.

Phosphorus-potassium fertilizers are applied in full to get the planned yield. If 50-70% of the demand for nitrogen fertilizers is met by nitrogen fixation, the rest is absorbed from the soil and fertilizers. If we plan to harvest 30-35 s / ha, *Pisum sativum* absorbs 180 kg of nitrogen, of which 105-126 kg should be added as a fertilizer for the remaining 45-54 kg due to symbiosis.

In the conditions of Uzbekistan, *Pisum sativum* gives high yields in the foothills and mountainous areas of arable land. In the plain-hill regions, the yield of *Pisum sativum* depends on the amount of atmospheric precipitation. In dry farming, *Pisum sativum* yields 6-8 s of grain and 60-70 s of green mass per hectare on average. *Pisum sativum* is a good predecessor for cereal crops in arable land. It is mainly planted in the crop rotation area, followed by winter cereals (wheat, barley). Its effect as a nitrogen-fixing crop lasts for 1-2 years.

Vostok-55, Vostok-84 and Khashaki24, Ramonsky-77 varieties of *Pisum sativum* are grown in dry farming. Of these, Vostok-55 in the spring and autumn, Hashaki-24 and Ramonsky-77 were registered in the State Register for spring planting. Vostok-55 and Khashaki-24 varieties of pea are resistant to drought, frost,

are less damaged by insects and are grown for food. When *Pisum sativum* is planted in late autumn, it yields twice as much as when planted in spring.

CONCLUSION

From the above data, it can be concluded that crop rotation is of great importance not only in improving the condition of the soil, but also in obtaining a rich harvest.

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