

EFFECT OF MINERAL FERTILIZER QUANTITIES ON GROWTH AND DEVELOPMENT OF COTTON IN REPEATED LEGAL CROPS

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ANNOTATION

At present, in the world agricultural practice in the cultivation of high-quality cotton from cotton, the sowing of legumes as a secondary crop in the areas freed from winter cereals, the past crop types and the existing exchange in determining the norms of crop nutrition. Research on reducing the standards of nitrogen fertilizers used in the care of legumes by treating them with nitragin before sowing, using resource-efficient agrotechnologies in their cultivation is up to date.

Keywords: soil, climate, mineral fertilizers, cotton, growth, development, legumes, varieties, crop rotation.

ANNOTATSIYA

Hozirda dunyo qishloq xo'jaligi amaliyotida g'o'zadan yuqori va sifatli paxta hosili etishtirishda kuzgi boshqoli don ekinlaridan bo'shagan maydonlarga takroriy ekin sifatida dukkakli don ekinlarini ekish, ekinlarni oziqlantirish me'yorlarini belgilashda o'tmishdosh ekin turlari va qo'llanilayotgan almashlab ekish tizimlarini inobatga olgan holda belgilash, ularni etishtirishda resurstejamkor agrotexnologiyalarni qo'llash, dukkakli don ekinlari urug'larini ekish oldidan nitragin bilan ishlov berish orqali ushbu ekinlarni parvarishlashda qo'llaniladigan azotli o'g'itlar me'yorlarini kamaytirish bo'yicha olib boriladigan tadqiqotlar dolzarb hisoblanadi.

Kalit so'zlar: tuproq, iqlim, mineral o'g'itlar, g'o'za, o'sish, rivojlanish, dukkakli ekinlar, navlar, almashlab ekish.

АННОТАЦИЯ

В настоящее время в мировой агропрактике при возделывании сортового хлопчатника из хлопчатника посев бобовых в качестве вторичной культуры на освободившихся от озимых зерновых площадях учитывают прошлые виды культур и существующий обмен при определении норм питания сельскохозяйственных культур. Актуальны исследования по снижению норм азотных удобрений, применяемых при уходе за бобовыми культурами, путем обработки их нитрагином перед посевом, использования ресурсосберегающих агротехнологий при их возделывании.

Ключевые слова: почва, климат, минеральные удобрения, хлопчатник, рост, развитие, бобовые, сорта, севооборот.

INTRODUCTION

In order to fully meet the needs of the population in food and fodder products and increase the yield of crops in the cotton complex, the country is widely planting replanted crops on areas vacated by autumn cereals. In the Action Strategy of the Republic of Uzbekistan for 2017-2021, it is important to "... consistently develop agricultural production, further strengthen food security, expand the production of environmentally friendly products, significantly increase the export potential of the agricultural sector." defined as strategic tasks.

To increase the efficiency of the use of irrigated lands in different soil and climatic conditions of the Republic R.Oripov, B.M.Khalikov, N.Khalilov, N.Urazmatov, A.A.Iminov, F.B.Namozov, M.M.Tojiev, S.Bakhromov, K.Juraev, Ya.Burievlar, freed from autumn grain crops R.Oripov, H.N.Atabaeva, B.M.Khalikov, N.Khalilov, N.Urazmatov, D.Yo.Yormatova, N.M.Ibragimov, A.A.Iminov, F.B.Namozov, M.A.Avliyokulov, M. on development and improvement of agro-technologies of repeated crops cultivation Tojiev, F.M.Khasanova, Ya.Buriev, L.A.Mirzaev, I.T.Karabaev, A.Mansurov and abroad B.Volger, H.M.Taylor, H.R.Gardner, G.Zhou, O.Christen, B.Pallut, J.Strassemeyer, S. Extensive research by scientists such as Dieke, B.Malander carried out.

The introduction of legumes as a secondary crop after the autumn grain crops in the short-term crop rotation systems introduced in the country will serve to increase the yield of cotton and cotton complex crops and improve its quality. As a result, the fertility of our soils will be maintained and increased, and the use of irrigated lands will be more efficient. This, in turn, will provide the population with food and fodder. In this regard, a number of research studies have been conducted on the introduction of secondary and intermediate crops in the areas freed from winter wheat after changes in the structure of agricultural crops in the country, their effectiveness in increasing soil fertility and crop yields. The results of the work were obtained and recommended for different soil and climatic conditions of the republic.

According to A. Iminov and E. Avliyokulov [2008], in the 1: 1 (cotton: grain) system of short-term rotation, legumes grown as a secondary crop of cotton (soybean, bean, mosh) and mixed siderate (perco, oats, green peas) when grown after crops, ensuring a high and quality cotton yield, cotton yield 3.9-6.0 s / to, fiber yield by 1.0-2.0%, mass of 1000 seeds 7.5-14.0 g. to, and the fiber length was 0.4-0.9 mm higher.

Due to the rapid population growth in our country, the efficiency of irrigated lands is increasing. The basis of agricultural crops grown in our country are cotton and winter cereals. At present, more than one million hectares of our irrigated land are cultivated with winter cereals every year. This means that once the winter cereal crop is harvested, it will be possible to grow the same amount of crops again. In this regard, the main focus in the areas free of winter cereals is the cultivation of legumes, cereals, vegetables and fodder crops that meet the needs of the population for daily food and livestock feed. to further strengthen food security and fully meet the needs of the population in agricultural products.

The activity and activity of endogenous nitrogen-fixing bacteria living in the roots of legumes is closely related to the life of the plant being grown. quality performance, especially in terms of soil and climatic conditions of each region, the correct determination of the timing and norms of their planting.

Legumes produce physiologically active substances that improve the activity of root bacteria. As a result, free nitrogen in the air is better absorbed. Some of the absorbed nitrogen is necessary for the future life of the plant and has a positive effect on its growth and development. According to the study, in the fertile soils of Europe, due to soil and climatic conditions, the average grain yield was 20.3 s / ha, and in some years - 23.5 s / g. .

It is known that the cultivation of crops on irrigated lands as a secondary crop requires the development of specific agro-technologies. This is because the efficient use of irrigated land is one of the internal opportunities to increase economic interest, and the role of secondary crops in meeting the food needs of the population is invaluable.

To date, a lot of scientific and practical research has been conducted in the country on the cultivation of secondary crops after the harvest of autumn cereals in mid-summer, to obtain a rich and high-quality crop. However, there are insufficient scientific resources to develop agrotechnologies for growing legumes and other agricultural crops that increase soil fertility as a secondary crop.

Therefore, it is possible to grow mosh, soybeans, beans and other legumes twice a year from irrigated lands as a secondary crop, and get high quality products from them. Therefore, the main opportunity to increase the area under legumes, which are one of the main sources of protein and vitamin-rich cereals, should be to grow them as secondary crops.

Even in the experiments conducted under production conditions, the highest yields of cotton were treated with nitragin before sowing the seeds of soybeans and moss, and the norm of mineral fertilizers was N30 R90K60kg / ha. Against the background of the applied cotton from the cultivated options next year was 40.3-41.2 s / ha, while the seeds of soybean and mosh crops were fertilized without nitrogen treatment before sowing. Against

the background of the application of the norm of dogs N60R90K60kg / ha, next year the cotton yield was 38.7-39.5 s / to from the variants of cotton.



In soybean and mosh crops grown as a secondary crop after winter wheat, cotton was harvested in the amount of 34.3-34.9 s / ha from cotton grown next year in nitrogen-free control variants. In the case of soybean and moss seeds treated with nitragin before sowing, and soybean and moss seeds are fertilized without fertilizer in the amount of 35.6-36.0 s / ha from cotton grown next year. cotton harvest was obtained (D.Kholdarova 2019).

CONCLUSION

In summary, the formation of endogenous bacteria in the roots of legume crops was treated with nitragin before sowing the seeds of soybean, mosh crops, and the norm of mineral fertilizers N30 R90 K60 kg / ha was 28.9 in the applied variants. -41.4 units, ensuring a higher yield of 15.4–16.4 units compared to control options without the use of any mineral fertilizers. Excessive use of nitrogen fertilizers can lead to a decrease in the number of buds that form on the roots of the plant.

Bradyrhizobium before sowing soybean seeds grown as a repeat crop after winter wheat to grow high-quality cotton from cotton in a 1: 1 (cotton: grain) system of short rotation rotation japonicum SB5, seeds of moss sown with nitragin in Phaseolus radiatus 148 strains, mineral fertilizers N30 R90 K60 kg / ha in repeated crops and N200 R140 K100 kg / ha in cotton. It is recommended to use on the ground.

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