

## **GROWING MUNG BEAN AS A REPEAT CROP IS AN ADDITIONAL SOURCE OF INCOME**

Bakhramova Nilufar Nazarovna

Doctor of Philosophy in Agricultural Science,

Southern Agricultural Research Institute,

180100, Karshi City, Kashkadarya Region, Uzbekistan

### **ABSTRACT**

This article talks about the benefits of the growth and development of mung bean cultivation as a re-crop after cereals.

**Keywords:** re-culture, mung bean, plant height, number of beans, number of grains in a pod, and weight of grains.

### **INTRODUCTION**

In our republic, after the harvest of autumn grain crops, there is an excellent opportunity to grow repeated crops instead of them. Let's say that if the grain crops are harvested in mid-June, then there will be four months of hot and humid days. This makes it possible to plant repeated crops after the autumn grain crops in our republic and get a harvest.

### **ANALYSIS OF THE RELEVANT LITERATURE**

When mung bean is grown as a repeated crop in the field of winter wheat, 300-400 tons/ha of green mass is produced, and if it is plowed into the ground, each hectare of land is enriched with 100 kg of biologically pure nitrogen and organic matter equal to one year's standard of rotted manure. Mung bean leaves behind 2.5-3 tons of root and plant debris in the soil during the entire growing season.[1;3].

Mung bean is 1,5-2 times more nutritious than wheat, beans, peas, green peas and rye grains, and 1,5 times more nutritious. The digestibility of protein in mung bean reaches 86%. Mung bean contains 24-28% protein, 8% lysine, 7% arginine, and a lot of vitamins B<sub>1</sub> and PP [3].

Based on the above thoughts and considerations, "Durdona" variety of mung bean was planted for 3 years as a repeated crop in the conditions of light gray soils of Kashkadarya region.

After winter wheat was harvested in June, the field was first irrigated to plant a repeat crop of mung bean seed under the experimental system. After the soil moisture was acceptable for plowing, phosphorus and potassium fertilizers were given according to the experimental system, and plowing was carried out on the MTZ-80 tractor at a depth of 20-22 cm. After that, the upper part of the land was leveled and a 90 cm wide paddy field was taken. Repeated mung bean seed planting was done in early June, watered for seed recovery and 2-3 times during the growing season. After sprouting, mash seeds were threshed by hand and cultivated 4-5 times between the rows.

In order to determine the development and productivity of the grains in the pods of mush planted as a repeated crop after winter wheat after 75-80 percent ripening, biometric measurements were carried out in the variant where mung bean was planted as a repeated crop

Table 1 Productivity of biometric indicators of mung bean

T/R	Predecessor crop type	Plant height, cm	Harvester grain	Average number of pods, pcs	The number of grains in a pod, pcs	Weight of 1000 grains, g	Productivity, ts/ha
<b>2018 year</b>							
<b>1</b>	Autumn wheat	55,7	5,8	22,6	11,0	52,6	15,7
<b>2</b>	Autumn wheat	56,2	5,5	21,8	10,0	51,2	15,2
<b>2019 year</b>							
<b>1</b>	Autumn wheat+ mung bean +perko; cotton; autumn wheat+ mung bean	57,8	6,3	22,4	12,1	60,4	15,9
<b>2</b>	Autumn wheat+ mung bean +rye; cotton; autumn wheat+ mung bean	57,2	7,0	22,0	10,2	60,4	16,3
<b>2020 year</b>							
<b>1</b>	Cotton; winter wheat+ mung bean +perko; cotton; autumn wheat+ mung bean	59,0	7,0	21,8	11,0	55,4	16,8
<b>2</b>	Cotton; winter wheat +mung bean+rye; cotton; autumn wheat+mung bean	56,4	5,8	21,0	10,7	55,8	15,9
<b>Average over the years</b>							
<b>1</b>		57,5	6,4	22,3	11,4	56,1	16,1
<b>2</b>		56,6	6,1	21,6	10,3	55,8	15,8

During the 2018-2020 period of the research the plant height of mung bean is proportionately 56,6-57,5 cm, the number harvester grains 6,1-6,4, number of average 21,6-22,3, the number of grains in a pod 10,3-11,4, 1000 grains weighed 55,8-56,1 g. Mung bean yield is 15,2-15,7 t/ha in 2018, 15,9-16,3 t/ha in 2019, 15,9-16,8 t/ha in 2020, average 3-year yield is 15,8-16 It was 1 t/g. In general, the mallow crop yields well in various ecological and soil-climatic conditions and can be grown even in soils with low fertility. Moss is a drought-resistant, resource-efficient crop, and its cultivation as a repeat crop does not require large costs.

In order to make efficient use of cultivated land in the future, it can be concluded from the results of repeated cropping that in the conditions of light colored ice soils of Kashkadarya region planting mush as a repeat crop on the land areas where the winter wheat harvest was harvested it was found that it is possible to get abundant, high-quality harvest. In addition, khashagi is a good source of food for livestock and a source of additional income.

---

**List of used Literature**

1. Yormatova D. Biology and cultivation technology of field crops T. Labor 2000.
2. Iminov A.A. Repeat crops and winter wheat. Water and resource saving agrotechnologies in the Republic of Uzbekistan. Tashkent. 2008.
3. Oripov R.O., Khalilov N.Kh.ohplant science. Tashkent 2006.