

VARIETIES AND ACHIEVEMENTS OF MOSH PLANT SELECTION IN UZBEKISTAN

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Abstract. This article provides general information about the varieties, fertile species of the mosh plant in Uzbekistan, which is of great importance in the food industry, livestock and other industries.

Keywords: mosh (*Phaseolus aureus*), legume family, growth period, Pobeda 104, Radost, fuzariosis, bacteriosis, ascochitosis, yellow mosaic. Pests: click beetles, naked and mucous worm, field candelabra.

СОРТА И ДОСТИЖЕНИЯ В ВЫБОРЕ РАСТЕНИЯ МАША В УЗБЕКИСТАНЕ

Аннотация. В данной статье приведены общие сведения о разновидностях, плодовых видах маша в Узбекистане, имеющей большое значение в пищевой промышленности, животноводстве и других отраслях.

Ключевые слова: маш (*Phaseolus aureus*), семейство бобовые, период роста, Победа 104, Радость, фузариоз, бактериоз, аскохитоз, желтая мозаика. Вредители: жуки-щелкуны, голый и слизистый червь, канделябр полевой.

INTRODUCTION

Mosh (*Phaseolus aureus*) is an annual herbaceous plant to the legume family. The plant provides itself with nitrogen through the tuberous bacteria at the roots. The arrowroot penetrates up to 1.5 meters into the soil, forming shoots that accumulate nitrogen. The STEM is round in appearance, jagged. Height up to 30-130 CM, on average 50-60 cm, branches well. Due to the fact that the stem occupies a large area, the assembly using mechanization is heavy. Ripening pods are brown, almost black. The plant hangs from the stem, chattering if not collected quickly after ripening. The seed is small, slightly oblong; the size is 3-5 mm, the color is yellowish, green, black, the seed weight of 1000 pieces is 40-80 gr.

Mosh is a heat-demanding plant, the seeds of which begin to germinate at 10-12°C. The seeds of the mosh germinate in 4-5 days at 20-22°C. Resistant to spring frosts. Both young lawns and large adult self-centerpieces die in 1-2°C Frost. Mosh is considered a light-demanding plant. It cannot grow in arid conditions. Mosh is not demanding on the soil due to its biological characteristics. It develops well growing on black, gray, Meadow Gray, loamy, soggy, slightly saline soils. Meadow Gray soils are considered the best soil for mosh in Uzbekistan. Even if the soil is low in nutrients, the legume at the root of the mash provides itself with nitrogen with the help of bacteria. Mosh is a self-pollinated plant. The growing season is 80-120 days. During repeated planting, the growing season is shortened by 15-10 days than in spring. Diseases: fusariosis, bacteriosis, ascochitosis, yellow mosaic. Pests: click beetles, naked and mucous worm, field candelabra.

MATERIALS AND METHODS

Currently, 10 varieties of mosh are grown in Uzbekistan. In Uzbekistan, varieties Pobeda 104 (since 1948) and Radost (since 1984) are planted. The mash products grown in our country

today are exported to countries such as Australia, Austria, Azerbaijan, Afghanistan, Belgium, Great Britain, Vietnam, Germany, India, Indonesia, Republic of Iraq, Iran, Kazakhstan, Qatar, China, Korea, Kyrgyzstan, Latvia, Mongolia, Netherlands, UAE, Pakistan, Poland, Russia, Tajikistan, Taiwan, Turkmenistan, Turkey, Ukraine. As a starting material, virginamunas are mainly used in the world collection. The VIR collection contains 7 thousand samples of 14 types of beans. In addition, local population varieties and hybrid populations are used as starting materials, as well as forms created by the method of artificial mutagenesis. An important area of \ u200b \ u200bmush selection is the creation of fast-growing varieties. When assessing fastness, the period from germination to flowering is taken as a basis. Fastness is closely related to its low temperature resistant property. A decrease in temperature from 5 degrees to 0°C in the short term leads to deep changes in the physiological activity of most varieties of plants. As a result, the period of action lengthens, productivity decreases. Therefore, the creation of varieties resistant to low temperatures belongs to the important task of selection. The technological characteristics of the varieties include first the higher placement of the pods at the bottom, which gives the convenience of harvesting by the mechanization method (with a combine). In addition to the directions of Mosh selection, it is aimed at preventing Cracking of the pods, resistance to diseases and the quality of the crop, as well as the content of calcium and its amino acids. 82 Mosh (Asian species of beans) are extremely resistant to diseases. However, plants of this species do not interbreed with plants of the American Group species.

RESULTS

Of great importance in Mosh selection is natural hybridization, single and mass selection within the species and in populations formed by hybridization of distant species, chemical and radiation mutagenesis. Most varieties of beans (moshning) were created by single selection in domestic or overseas introduced varieties and populations. When choosing alone, plants are selected in the field with the highest yield, resistant to fungal diseases, viral and bacterial diseases, with high pods, which do not crack. The seeds of each plant are sown separately in the selection nursery, and during the year the offspring are studied and the seeds of the best are separated, studied, tested and multiplied in the preliminary and selection varietal testing in the control nursery. Within the species in the Mosh selection, hybridization is widely developed. With this, all interspecific hybridization is also used. In recent years, artificial mutagenesis has been widely used in mosh selection. As a result of mosh selection work in Uzbekistan, Pobeda 104 and Zilola, Coral, Amber, Navruz, Radost varieties are zoned and included in the State Register. Pabeda 104. The stone was created at the Department of selection and seed production of the Faculty of biology and Soil Science of DAU. It is 30-50 cm tall, the leaves are large, the flowers are golden yellow. The pods are long, covered with black hairs. There are 10-15 seeds in the legume. The mass of 1000 seeds is 70-80 g. It ripens in 80 - 100 days if planted in spring and 75-90 days if planted in summer. The yield is 12-16 ts/ha. It is planted in all regions of Uzbekistan. Radost variety. Created at the ShITI of Uzbekistan. The height is 60-70 CM, the first pods are located at a height of 15-17 CM. The shingle has 6-8 flowers. There are 10-14 grains in the legume. The weight of 1000 grains is 30-49 g. The protein content is 24.2-27.3%. The average yield is 18.0-18.5 ts\ha, resistant to diseases.

DISCUSSION

Types of mash:

Radost

Created by the Research Institute of rice husbandry of Uzbekistan. Since 1984, acclimatized for the irrigated lands of the country, it is colored, smooth, in rare cases bent, with 10-14 seeds.

The seeds are medium-large, oblong, Green in color, smooth, with a low glossy ypyg' palette White. The protein content in the seeds is 27%. Recommended for planting in all regions on the territory of our country.



Qahraba

The variety was created by single selection. It is recommended to plant this new variety in Angie as a repeated crop after wheat in order to obtain grain, blue stems. The ripening period is 80-85 days, the yield is 13-17 c per hectare, the plant height is 65-75 CM, the seed contains a protein substance-28%, the seed weight of 1000 pieces is 55-60 gr, the stem view is stamped, the flower is yellow, the early-ripening variety, the planting period is April 20-25, the norm is 10-12 kg/ha. Recommended for planting in all regions on the territory of our country.

Navruz

Created by choice, zoned in 2005, it is recommended to plant after wheat in Angie as the main crop and as a repeated crop to obtain grain and blue stems. The growth period is 90-95 days, the yield is 14-16 c/ha per hectare, the plant height is 95-100 CM, the protein content in the seed is 22– 24%, the seed weight of 1000 pieces is 60-65 g., stem view stampede, flower yellow, early maturing variety, planting time the norm of sowing seeds by June 20 on a repeated crop is 10-12 kg. Recommended for planting in all regions on the territory of our country.

Durdana

Variety originator: selection variety of the Research Institute of Plant Science.

Authors of the variety: Alimov J, Pirnazarov J, Mavlyanova R.

Regions recommended for planting: included in the state register for the Republic from 2011. The height of the plant is on average 35-40 CM. The grain is medium in size, smooth. The weight of 1000 grains is on average 64.0 gr. The average grain yield is 23.8 centners. The growing season is on average 54 days. The variety's resistance to laying is 5.0 points, spill resistance is 5.0 points. Taste quality is good.

During the test years, it was not damaged by agricultural diseases and insects. Recommended for planting in all regions on the territory of our country.

Zilala

Variety originator: selection variety of the Research Institute of Plant Science. Authors of the variety: Mevlyanova R, Alimov J, Pirnazarov J.

Regions recommended for planting: included in the state register for the Republic from 2008. The height of the plant is on average 35-40 CM. The grain is medium in size, smooth. The weight of 1000 grains is on average 72 gr. The average grain yield is 29.0 centners. The growing season averages 61-67 days.

The variety's resistance to laying is 5.0 points, spill resistance is 5.0 points. Taste quality is good. During the test years, it was not damaged by agricultural diseases and insects. Recommended for planting in all regions on the territory of our country.

Coral

Variety originator: selection variety of the Research Institute of Plant Science.

Authors of the variety: Mevlyanova R, Alimov J, Pirnazarov J.

Regions recommended for planting: included in the state register for the Republic from 2008. The height of the plant is on average 45-50 CM. The grain is medium in size, smooth. The weight of 1000 grains is on average 79.3-83.1 gr. The average grain yield is 25.3 centners. The growing season is on average 75 days. The variety's resistance to laying is 5.0 points, spill resistance is 5.0 points. Taste quality is good.

During the test years, it was not damaged by agricultural diseases and insects. Recommended for planting in all regions on the territory of our country.

Turan

Variety originator: selection variety of the Research Institute of Plant Science of Uzbekistan.

Nav authors: Alimov J, Vorovit S, Mayalyanova R, Pirnazarov J, Alimova G.

Regions recommended for planting: since 2012, it has been included in the State Register on irrigated lands throughout the Republic. The plant is on average 150 cm tall. The growing season averages 110-120 days. The seed weight of 1000 pieces is on average 2.6-3.0 gr. The grain is resistant to shedding.

Average yield: 17-18 c/ha. The protein content in cereals is 24 %.

During the test years, it was not damaged by agricultural diseases and insects. Recommended for planting in all regions on the territory of our country.

CONCLUSIONS

In my place of conclusion, shunin I can say that the mosh plant is rich in protein, I found out that substances in the human body are of great importance in the exchange process, and are also distinguished by their importance in many other areas. In Uzbekistan, Pobeda 104 varieties (since 1948) and Radost (since 1984) have been planted in an updated form. In addition, I am not

mistaken if I say that the main direction of mosh selection is the creation of fast-growing varieties, the great goal of which Uzbek scientists face.



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