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Importance And Spread of Mosh Varieties

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Annotation: This article provides information about the importance, origin, distribution and varieties of the Mosh plant.
Key words: "Durdona", "Navroz", "Kahraba", "Radost", "Zilola", seed size, weight of 1000 seeds, legumes, soil fertility, planting rate.

Introduction

The origin of the Mosh is associated with India. Currently, mosh is planted in many countries. Chunonchi is grown in large areas in Uzbekistan, Turkmenistan, Azerbaijan, China, Korea, Japan, India, Pakistan, Egypt, Ethiopia and other countries. According to data from the Ministry of Agriculture, mosh is grown annually in our republic on more than 18-25 thousand hectares as a repeated crop.

Under the conditions of our republic, there are opportunities to grow grain crops from autumn wheat to 60-70 s/Ha, and from a mosh crop grown as a repeat crop to 15-20 s/Ha, bringing the grain crop grown for one season to 75-90 s/Ha. On Earth, legumes and cereals are planted on an area of 135 million hectares. Among legumes, the area under which mosh is planted is ranked second in the world in terms of volume (about 74 million hectares of soybeans in the world), and third in terms of volume (about 25 million hectares of soybeans in the world), and third in terms of peas (about 10 million hectares in total in the world) [1,2,3].

In the Central Asian and Caucasian republics, mosh is widely used in the food industry. When flour made from mosh is added to pasta, its satiety increases even more. Mosh legumes are a group of cereal crops that accumulate a large amount of 24-28% protein in their grain. It can be grown with the food industry as well as nutritious feed for livestock. Also, in the roots of the fly, the Tugan bacterium develops, absorbing free nitrogen and increasing soil fertility. Mosh as a legume is considered a soil fertility improvement crop, crop rotation increases productivity, saves nitrogen fertilizers, gives the opportunity to increase protein collection per hectare. The mosh leaves 2.5-3.0 tons of Root and pine residues in the soil after it during the entire growing season. The agrophysical and agrochemical properties of the soil have been positively altered by the cultivation of mosh as a repeat crop after autumn wheat, with the humus content in it increasing by 0.008 - 0.012% in the soil plowing (0-30 cm) layer, the total nitrogen content by 0.006-0.010%, and the total phosphorus content by 0.007-0.010%.

Results and discussion

Since Mosh is a type of beans, its Systematics is considered based on beans. There are more than 200 species of Phaseolus, of which about 20 species are cultivated, used as crops, the rest are wild species. By Origin, the species are divided into two (American and Asian) geographical groups. The American group includes the following common species: common bean (Phaseolus vulgaris L) with erect or decaying stems. There will be 3-5 seeds in the pods. 1000 seed weight 200-400 g. Seed color varies, from white to Orange; the multi-flowered (Phaseolus multiflorus Lam) has a long rotting stem, white and red flowers, large seeds. 1000 seed weight 700-1200 g; sharp-leaved (Phaseolus lunatus acatifolus Gray L) is hairy in shape, wide, short, flat, has 2-3 seeds in pods, quickly cracks. Lima bean (Phaseolus lunatus L) - there are monoecious and perennial forms [4,5]. The flowers are small, the pods are wide, flat, 2-3 grains. The grain is large, whitish, sometimes of a different color.

Many common types of Asian beans: Asian beans or mosh (also known as Golden beans, mungo beans, mungo beans, vigna moshi) – Ph.aureus Pip, adzuki-ph angularis Willch, rice beans Ph.

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calcaratus is a Piper. G.M.Popova Ph. the aureus species is classified into 3 subspecies: 1. s.sp.indicus G.Pop. - the pods are much thinner, the pods are up to 7 cm long and 0.3-0.5 cm wide, the grain is small, the weight of 1000 grains comes in 15-30 g. There are intermediate and quechpishar forms. They are mainly distributed in India. The main stem of representatives of such a mosh subspecies has a strong and straight-standing shape, which is very convenient to harvest its crop in a combine; 2. s.sp.chinensis Q.Pop. - the pods are large, 9-17 cm long, creamy (10 mm.up to); the seed is also large. The plant has an arrow root and is strongly developed. It grows in the soil at a depth of 110-140 cm, but the main part of the root is spread in the arable layer. A characteristic feature of the mosh plant is that even when this plant is grown in any soil conditions, nodular bacteria that absorb free nitrogen from the air are naturally formed in its roots. is acceptable, and the number of budding bacteria formed in each plant is on average 80-88 pieces. Also, 2.12% nitrogen, 0.88% phosphorus, and 2.65% potassium nutrients return to the soil and help restore its fertility with the remains of roots and roots in the soil where mash is grown. The stem looks round and pointed. It grows upright from the beginning of the growing season until it is cut, and then it grows in a creeping or semi-recumbent manner. Its height is 30-130 cm, on average 50-60 cm, it branches well. The branches are spreading or branched. Harvesting by mechanization is difficult due to the large area of the stem. The stem is covered with dark hair. The stem of the varieties "Durdona", "Navroz", "Qahrabo" is 68-95 cm on average, and it differs in that it grows erect and semi-shrub-like. Their stem belongs to the determinant, i.e. limited type [6,7].

The leaves are complex tripartite (triple), located in a 12-17 cm leaf band, covered with small dark yellow hairs, the color and thickness of the hairs is a sign of the mosh variety, the leaf bands are large and long. There are many hairs on the leaf band and on the back of the leaf. The leaves of mosh look like the leaves of beans. The flowers are large, purple and yellow. The flower is located in a ball. 10-20 flowers are attached to one bush. In shingles, part of the flower remains undeveloped and dries up. In general, the flowers of all leguminous plants are self-pollinating, and their flowers are pollinated inside the pods before they open. The general structure of the flower is similar to that of other legumes. The pod is a straight, curved or elongated thin pod, covered with a sharp tip of small dark hair. The hairs give the pod a dark color, it is 5-18 cm long, and there are 6-15 seeds in one pod. The plant hangs from its stem, and after ripening, it rots if it is not harvested quickly. Fruit. Cylindrical shape with a pointed end, blunt appearance, different degrees of hairiness depending on the variety, dark brown, black color when ripe, length can be up to 8.5-14.5 cm [8].

The pods are chattering, but on the basis of the new introduction (initial stage of acclimatization), the pods in the plants of upright growing varieties have a white fluffy hair inside the pods, these pods do not chatter, the grains do not fall out, their skin is hard (parchment shell It is characterized by i) thickness. Each plant can have an average of 46-78 pods. On average, 8-12 mash seeds are placed in each pod.

The seeds are often cylindrical, round, dark green, light green, brown green, light yellow, black, with a shiny skin, sometimes with thick hair, and a seed coat.

Also, mash seeds are small, oblong, 3-5 mm in size, dark, green, black in color. The color of the seed coat is black, sometimes white [9].

The weight of 1000 seeds is 50-80 g. In most cases, the seed bag of the grain is a white line. The amount of protein in grain is on average 24.3-27.2%, and the amount of oil can be 0.5-0.8%.

During individual development, the mosh goes through a series of stages of organogenesis, and they are as follows:

1) exaggeration;
2) germination;
3) stem branching;
4) planing;
5) flowering;
6) formation of pods;
7) ripening;

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8) full ripening.

"Navroz" variety. It was created by a selection process at the Rice Research Institute of Uzbekistan and was included in the State Register in 2005. It is recommended to plant sorghum after wheat as a main crop and as a repeat crop for obtaining grain and blue stalks. Ripening period 90-95 days, yield 14-16 per hectare, plant height 95-100 cm, seed protein content 22-24%, 1000 seed weight 60-65 g, stem appearance stamped , the flower is yellow, early variety, planting period is April 20-25 in the main crop, until June 20 in the repeated crop, the seeding rate is 10-12 kg [10,11].

"Amber" variety. It was created at the Rice Research Institute of Uzbekistan and was included in the State Register in 2005. It is a very early variety. Productivity is 18-20 centners per hectare when planted in spring, and 14-15 centners per hectare when repeated planting. The weight of 1,000 grains is 55-60 grams, the shape of the stem is characterized by an upright growth, the crop is suitable for harvesting with the help of mechanisms. The sowing period is April 25-May 5 in the main crop, and until June 20 in the repeated crop, the rate of seeding is 14-16 kg.

"Radost" variety. A selection variety of the Rice Research Institute of Uzbekistan. Created by crossbreeding N\4730x224501 samples of the All-Union Institute of Plant Sciences. X. Since 1984, it has been included in the State Register of irrigated lands in the republic. The plant is semi-bush. The growing season is 101 days. The height of the plant is 60-70 cm. The yield is 17.2 s/ha, the protein in the grain is 24-27%. The flower is large, yellow, there are 6-8 flowers in the shingle. The pod is cylindrical. The first pods are 15-17 cm high. Sparse, hairy. 10-14 grains. The grain is medium-sized, long, cylindrical, dark green, smooth. shiny, white on the back and sides. The weight of 1000 grains is 39-40 grams. The taste is good. It is characterized by resistance to agricultural diseases and pests. The sowing period is April 20-25 in the main crop, and until June 20 in the repeated crop, the rate of seed sowing is 12-15 kg.

"Durdona" variety. The "Durdona" variety of mosh was created at the Research Institute of Plant Science of Uzbekistan and entered into the State Register in 2008. Tezpishar is a variety that ripens in 60-63 days after the first pods sprout. The time of full ripening is 90-95 days. The pods are formed on the upper part of the stem, there are 20-25 pieces and they are comfortable for the skin. Grain yield is 25.0-28.5 s/ha. 1000 seeds weigh 85-87 g. Universal variety. It can be purposefully used in the rotation system with vegetables and grain crops. Increases soil fertility. The plants have a high seedling thickness, the feeding area is 10-15x15 cm. It is suitable for sowing and getting a full harvest in spring and summer. It can be used in the preparation of various dishes. The blue mass of the plant is a nutritious feed for cattle. The sowing period is from April 25 to May 10 in the main crop, and from June 20 to July 10 in the second crop. Seed sowing rate is 10-12 kg/ha.

"Marjon" variety. The "Marjon" variety of mosh was created at the Scientific Research Institute of Plant Science and entered into the State Register in 2008. Tezpishar is an early variety, the first pods ripen 60-63 days after the first grass sprouts. The time of complete ripening is 90-95 days. Pods are formed in the upper part, the number is 20-25 pieces, and it is very comfortable for my skin. Grain yield is 25.0-28.5 s/ha. The weight of 1000 seeds is 87 g. Universal variety. It can be successfully used in crop rotation with vegetables and grain crops. Increases soil fertility. Plants are resistant to high seedling thickness of 10-15x15 cm. It is suitable for planting in spring and summer and getting a full harvest. It can be used in the preparation of various dishes. The blue mass of the plant is a nutritious feed for cattle. The planting period is from April 25 to May 10 in the main crop, and until June 20 in the repeated crop. Seed sowing rate is 10-12 kg [12,13].

"Zilola" variety. The "Zilola" variety of mosh was created at the Research Institute of Plant Science of Uzbekistan and entered into the State Register in 2008. It is a medium variety, and the first pods ripen 70-75 days after the first grass sprouts. The time of complete ripening is 90-95 days. Pods are formed in the upper part, there are 20-25 pieces and they are comfortable for the skin. Grain yield is 25.0-28.0 s/ha. The weight of 1000 seeds is 87-90 g. Universal variety. It can be effectively used in crop rotation with vegetables and grain crops. Increases soil fertility. Plants are resistant to high seedling thickness of 10-15x15 cm. It is suitable for planting in spring and summer and getting a full harvest. It can be used in the preparation of various dishes. The blue mass of the plant is a nutritious

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feed for cattle. The sowing period is April 25-May 10 in the main crop, and until June 20 in the repeated crop. Seed sowing rate is 10-12 kg.

"Turon" variety. The "Turon" variety of mosh was created at the Research Institute of Plant Science of Uzbekistan and entered into the State Register in 2012. It is an intermediate variety, and the first pods ripen 65 days after the first grass sprouts. The full ripening time is 100 days. Pods are formed in the upper part, there are 20-25 pieces and they are comfortable for the skin. Grain yield is 29.0-31.0 s/ha. The weight of 1000 seeds is 82 g. Universal variety. It can be successfully used in the rotation system with vegetables and grain crops. Increases soil fertility. Plants are resistant to high seedling thickness of 10-15x15 cm. It is suitable for planting in spring and summer and getting a full harvest. Sowing period: April 10 in spring, June 15 in summer. Sowing rate is 12-16 kg/ha. It can be used in the preparation of various dishes. The blue mass of the plant is a nutritious feed for cattle[14,15].

Conclusion

Data visualization results in mosh (Phaseolus aureus Piper and Vigna radiata by final classification (L.) Wilczek) is a common crop in the world and is a valuable crop for feed. Mosh grain has been found to contain 24.8% protein, 1% oil, 3.5-4.5% kletchatka, 4.5-5.5% gray 62 -65% carbohydrated, 50.4% carbon water, 1.5% fatty acids, a, V_1, V_2 , V_3, V_6 , V_9, S, e, k medicinal drugs, sodium, phosphorus, potassium, magnesium, tnir, copper, spirit mineral substances and antioxidants.

Mosh improves soil fertility, the roots of which accumulate nitrogen-collecting bacteria throughout the growing season. During the growing season, under favorable weather conditions, it can accumulate up to 200 kg of nitrogen per hectare. Therefore, it is recommended to plow the ground, leaving the roots of the mosh on the ground. Mosh is a drought-resistant, resurstejamkor crop that does not require significant cost in cultivation.

In the system of crop rotation, mosh is a good predecessor crop. It is advisable that the Mosh spike is planted as a repeat crop after cereals and vegetables and a number of other crops. The Mosh crop increases the yield of almost all self-grown crops and harmonizes well with all agricultural crops.

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