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IMPORTANCE OF SORGHUM SACCHARATUM PLANT OF POACEAE FAMILY IN AGRICULTURE

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Abstract. This article presents information about the importance of the Sorghum saccharatum plant belonging to the Poaceae family in the national economy, its medicinal properties, its effective use, biomorphological, systematic analysis, and its role in medicine and folk medicine. In addition, information is given about the use of the plant for food, fodder and technical purposes.

Keywords: Sorghum saccharatum, lysine, poaceae, protein, crop, stem, flower, plant, moisture, temperature, root, leaf, seed.

ЗНАЧЕНИЕ SORGHUM SACCHARATUM РАСТЕНИЯ СЕМЕЙСТВА РОАСЕАЕ В СЕЛЬСКОМ ХОЗЯЙСТВЕ

Аннотация. В данной статье представлены сведения о значении растения Sorghum saccharatum, относящегося к семейству Poaceae, в народном хозяйстве, его лечебных свойствах, эффективном использовании, биоморфологическом, систематическом анализе, роли в медицине и народной медицине. Кроме того, приведены сведения об использовании растения в пищевых, кормовых и технических целях.

Ключевые слова: Sorghum saccharatum, лизин, злаки, белок, урожай, стебель, цветок, растение, влага, температура, корень, лист, семя.

INTRODUCTION

Sweet corn, or *sorghum saccharatum*, is an annual plant belonging to the *poacae* family. It is one of the most important grain crops used for food, fodder and technical purposes. Sweet corn grain was considered one of the main food crops in Central Asia, including Uzbekistan, until the 1950s. A famous national dish - goja - is prepared from grain. Its grain is a valuable feed for cattle, a mixture of fodder and starch, and a valuable raw material for the alcohol industry. Sorghum is still the main food crop in Africa, India and East Asia. After harvesting, the sorghum plant has the property of forming new shoots, i.e., additional stems. For this reason, it can be harvested twice a year, sometimes up to three times. Sorghum produces sinilic acid in its stems and leaves when it is harvested early and when the soil is not wet enough.

MATERIALS AND METHODS

As a result of the breakdown of glycosides, a poisonous substance - sinilic acid is formed. Its amount can vary from 0.003 to 0.31%, and 0.1% is considered toxic. Cattle fed with such blue stem can be poisoned. Therefore, when the corn is planted early, it should be slightly cooled or dried and given to cattle need As the plant ages, the amount of sinilic acid decreases sharply and it breaks down. The green mass of sweet corn is used to make silage or hay. There are 119 nutritional units in 100 kg of grain, 23.5 in green mass, 22 in silage, and 49.2 in hay. The grain of sweet corn contains 70% starch, 12% protein, 3.5% fat and a number of mineral salts. Its protein is rich in lysine. Sugarcane stalks contain 10-12% cane sugar and 1.2-2% glucose. The pulp obtained from these varieties is used in the canning industry. Broom brooms and brushes from the dung of the broom broom are planted in Uzbekistan for grain and green mass as a single and repeated crop in the fields freed from grain crops.

RESULTS

It is cultivated in sub-mountainous and mountainous regions. Sweet corn is also of agrotechnical importance. It is a plant resistant to drought and soil salinity. It can be planted as a repeat crop. E.S. According to Yakushevsky's classification, there are several cultural types of the sorghum genus:

1. Sorghum guineense Jakuschev-is a very late-growing annual plant. It is mainly grown for grain. The height of the plant is different, it is often low, usually it has one stem. The grain is open, easily whitened, and the varieties used for food are white. The trunk is hollow, straight or double. The core of the stem is dry or juicy, slightly juicy. The longitudinal middle vein of the leaf is yellowish white or white. The joints on the stem are shorter than the leaf blades. The local varieties of sorghum, which produce a curved tuber, are widely grown in Uzbekistan.

2. Sorghum caffrorum (Bayeuv) Jakuschev - low-growing, drought- and cold-resistant annual plant. It is planted in the CIS countries and used in hybridization. Varieties that are planted to get molasses from the stem of the swamp, often for fodder preparation and to suppress juicy silage belong to this group. The stem of this variety is very tall, fluffy, and the core is sweet. High permeability. The grain is leathery or semi-leathery, hard to peel. The main vein of the leaf is green, gray-green, or purple in color. The joints of the stem are longer than the leaf blades. It grows profusely, often becomes dense.

3. Sorghum bantuorum Jakuschev - a one-year plant that requires heat and moisture, is very resistant to scab disease, grows well in heavy soils. Dung is used to make brooms and brushes. The length of the stem is different, the core is dry. The grain is always hard to clean. The main vein of the leaf is white. The trunk is long (40-90 cm), bent to one side, the main axis is short or absent. Buckwheat varieties differ from each other in a number of characteristics, such as stem, stalk, grain color.

4. *Sorghum durra* (Forsk) Jakuschev-is an annual plant resistant to drought and heat, there are many varieties of available forms and varieties. It is widely distributed in Central Asia under the name of corn.

5. Sorghum chinense Jakuschev - or sorghum sorghum, a drought-resistant, quickgrowing annual plant, has various varieties in East Asian countries (China, Korea, Japan).

6. Sorghum saccharata (L) Persisting-annual plant with different growth periods, podded and semi-podded grain. The core of the stem is sweet and juicy. It is grown for fodder, as well as for technical purposes (to obtain molasses, alcohol).

7. Sorghum technicum (Koern) Rozcher-is an annual plant with a dry stem, usually long (30-90 cm), seedless or very short seeded pods, with bark, the hard grain is finished. In addition to these types, there is a group of grassy sorghum, which includes annual wild species. Of these species, only sudan grass is planted in our country. Below are the common characteristics of the mentioned seven types of buckwheat.

The root system is a strongly developed, highly branched taproot. It penetrates 2-3 m deep into the ground. There are supporting roots coming out from the lower joints of the stem.

The stem is cylindrical, growing upright, filled with a soft core, its height is on average 2-3 meters, but it can reach 5-6 meters. There are 8 to 25 nodes on the stem. Sorghum clumps well and produces 2-4 or more branches at the joint of the clump. Sometimes varieties branch from

the above-ground joints of the stem. Such branches are called bachki. Cereal varieties are less crowded, forage (sweet) varieties are more crowded. The end of the stem ends with a flower.

The large lanceolate leaf is covered with a gray waxy powder. The main axis is long or short. Long or short lateral branches emerge from the main axis, and these also branch. It is a large and drooping plant with upright growth. Depending on the density of the branches in it, the rootstock is divided into sparse, dense, and flower rootstocks. There are double or triple spikes at the end of each branch. If one of them is a standing spike, the crop ends, the other two (or one) are short spikes, the crop does not end and they fall off after flowering.

DISCUSSION

All the spikes are single-flowered, the flowering spikes are bisexual, and the unfruitful spikes are male. After flowering, the barren spikes are partially shed, but some remain in the form of mature husks. The husks of the spike are ripe, leathery, wide and convex, usually shiny, hairy, of various colors, and completely or partially surround the grain. Accordingly, when crushed, the grain remains wrapped in husks (skinned forms) or separated from them (skinless forms). Flower shells are thin membranous. Sorghum grain is round, ovoid, elongated, ovoid, somewhat narrow on both sides, with or without skin. The original color of the grain is different. The weight of 1000 pieces is 20-30 g, sometimes less than 20 g. Depending on the use in the farm, varieties of sorghum are divided into different groups.

CONCLUSION

In conclusion, white sorghum is one of the most important cereal crops used for food, fodder and technical purposes. Its grain is a valuable feed for cattle, fine fodder and starch, and a valuable raw material for the alcohol industry. On irrigated lands, under the conditions of Uzbekistan, white sorghum is harvested several times. Its green mass is used to make silage or hay.

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