

Technologies of Grain Crop Growing In Surkhandarya Region of the Republic of Uzbekistan

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Abstract: Cereals are a large group of plants that produce the most essential nutrients. Cereals supply grain and cereals, which are the main food products. This article provides information on technologies and methods of growing cereals in Uzbekistan, especially in Surkhandarya.

Keywords: cereals, selection, straw, plowing, Titus, herbicides, pathogenic fungi.

From the first years of independence in our country, one of the priorities has been to provide the population with grain and grain products grown in our country. Under the leadership of the President, a large-scale work has been done to achieve grain independence. In particular, the area under cereals has been significantly expanded due to irrigated lands. Attention was paid to selection and seed production. High-yielding, high-quality grains were planted on a large area. As a result, the population's demand for bread and bakery products has been met.

Cereals are the most important group of agricultural crops grown for grain; Cereal grains are the staple food of man; raw materials for many industries, as well as fodder for livestock. In terms of grain composition and consumption, cereals (wheat, rye, barley, July, oats, corn, oats, etc.), including cereals (millet, corn and buckwheat, etc.), legumes (legumes). , peas, soybeans, vetch, etc.). Among cereals, cereals play a leading role. Despite the diversity of botanical forms, they have many common morphological features. The stems are straw (wheat, rice, oats) or filled with soft tissues (corn, corn). The leaf consists of a sheath and a ribbon-shaped leaf plate. There is a thin tongue at the junction of the vagina with the leaf blade, which is connected to the straw. There are ears on both sides of the tongue, but some cereals (oats, rice) do not have ears. Cereals (wheat, rye, barley) or rye (oats, millet, rice, corn) The flowers are bisexual, in maize bisexual. Fruit doncha. Cereals contain carbohydrates (60-80% of dry matter), protein (7-20% of dry matter), enzymes, vitamins V, RR and provitamin A. Depending on the growing season, cereals are divided into autumn and spring (morning and evening).

Wheat is one of the most widely grown cereals in the Surkhandarya oasis. Wheat is one of the main grain crops not only in the Surkhandarya oasis, but also in the country. The raw materials obtained from this plant are used for baking bread, making cereals and pasta, making alcohol and other purposes. The technology of growing wheat is very complex, but careful adherence to all the nuances of cultivation of the crop in question will allow you to get a high yield.

The technology of cultivation of spring wheat. The first thing in choosing a place for wheat is to take into account the influence of the predecessor. The best legumes are also family crops. It is not recommended to sow spring wheat grain in a field where winter wheat is grown, as pests larvae and spores of pathogenic fungi may remain in the soil. The high yield of wheat can only be obtained with sufficient nutrients in the soil. In this regard, before planting, the soil is applied complex mineral fertilizers with high content of nitrogen and phosphorus. The level of nutrient application depends on the area where the plant is grown, the amount of humus in the soil, and the effect of the previous plant.

Growing soil for wheat involves disc plowing and plowing if the crop is planted on land where perennial grasses used to grow. After the grain crops, peeling is done twice in the fall, and in the spring the ground is tilled and the grain is planted. Some farmers do not touch the ground in the fall and spray herbicides on the field to kill weeds. In the spring, for wheat, the site is plowed to a shallow depth or discarded twice.

To obtain early and friendly seedlings should use selected large seeds collected from high-yielding areas of the field, as well as elite seed material. Seeds are treated to prevent root rot and smut development. Early sowing of spring wheat is recommended, which will prevent the plants from falling into a constant drought. The ideal option would be to plant spring wheat grains when the top layer of soil is heated to 5 degrees. Grains are planted to a depth of 4-5 cm using a special seeder, for example, SZU-3.6, compacting the soil with a roll. This method allows the seeds to absorb moisture and accelerate germination. The sowing rate is 4-5 mln.

Crop care is the protection of plants from diseases and pests, as well as the destruction of weeds. In order to reduce the impact of these negative factors affecting the development and yield of wheat, it is necessary to ensure the correct rotation of crops in the rotation, sowing seeds at the recommended time, timely tillage and the necessary doses of fertilizers. seeds should be sown to the recommended depth, as significant deepening of the grains leads to a weakening of immunity against disease. The use of large seed material increases germination, and over-fertilization with nitrogen fertilizers contributes to the development of many diseases of wheat.

Weed control in crops involves treating plants with herbicides such as Titus. The impact of diseases and pests can be reduced through the cultivation of seed material and disease-resistant varieties. You can start earlier by using a separate cleaning method. The wheat is rolled, kept for 2-3 days and crushed with a combine. You can immediately start to combine directly, but the moisture content of the grain should not exceed 22%.

Autumn wheat cultivation technology. Autumn wheat grains can germinate in the air temperature in the range of 1-2 degrees Celsius, but intensive development of the crop requires a temperature of 10-12 degrees. The technology of growing winter wheat should include the planting of winter-hardy varieties, for example, Belotserkovskaya 198 or Mironovskaya 808. With the loss of seedlings of some crops in the winter with little snow combined with a negative temperature of -16 degrees. depending on. In the timely sowing of winter wheat it is important to achieve good tillage of plants, which is possible through the use of large seeds and the application of high nitrogen mineral fertilizers. This crop needs good predecessors that help clear the soil of weeds and accumulate moisture. The choice of predecessors depends on the weather conditions in a particular region. For example, in arid regions, it is better to sow winter wheat in the black autumn, because in such soils moisture and nutrients accumulate well.

In the climatic conditions of Uzbekistan, even in winter there are warm days with positive temperatures. During this period, the plants may lose their resistance to cold temperatures and resume the second stage of hardening. However, sudden changes in temperature during the winter do not allow the second stage of hardening to resume, and the plants die from the cold. During the winter, the consumption of carbohydrates for the respiration of organic acids reduces the hardening of the plant, and in late winter, even at lower temperatures than in early spring, the plants may die.

In the irrigated and fallow lands of Surkhandarya, if winter crops are sown at the most favorable times, they will germinate, accumulate and harden before the onset of permanent frosts. Wheat, barley, and rye are not affected by frost if they are watered before planting and planted at the best time. In winter, the overwintering of plants depends on the time of sowing and soil moisture. Wheat and barley, which are planted on dry land in late autumn, grow slowly as the soil dries out. When the soil moisture is not enough in the fall, the seeds sown in the dry lands of the plains often germinate in winter and spring. In the lowlands, the seeds sometimes germinate in autumn, winter, and spring. In the foothills and mountainous areas, the seeds germinate in autumn. In Lalmikor,

cereals sown in late autumn overwinter with 1 to 3 leaves and buds. In this state of development, the plants do not complete the period of hardening, and they are damaged or killed under various adverse conditions. In irrigated and fallow lands, autumn crops also die from frostbite. In Surkhandarya and Kashkadarya, compared to other regions, the cold snap is much less common.

In places where there is enough moisture, legumes, early potatoes, annual grasses are ideal pioneers of wheat. Such neighbors are especially recommended for growing crops on sandy and loamy soils in the North-West and non-Chernozem regions of the Russian Federation. Empirically, it has been determined that it is advisable to grow wheat in a field for no more than two seasons due to the accumulation of pests and pathogens in the soil.

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