INNOVATIVE TECHNOLOGICA
METHODICAL RESEARCH JOURNAL
ISSN: 2776-0987 Volume 2, Issue 5, May, 2021

THE IMPORTANCE OF GRAIN YIELD TO ENSURE THE QUALITY PRODUCTION

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Abstract
Cultivation of winter wheat is carried out using several agro-technological measures. High yields from frost can be achieved if these measures are carried out wisely and in a timely manner.

Keywods: variety, technological, structural-mechanical, physicochemical, productivity, technical, protein, gluten, vitreous, flour, cereals, mixed fodder, research, structure, consumption

The general condition of all grain-growing lands of the republic, the uneven climatic conditions lead to the expansion of their varieties. This poses a number of complications in the storage and processing of local wheat grains grown in this condition. Thus, the study of their technological, structural-mechanical and physicochemical properties and their application in production is an urgent problem.

The factors of increasing the share of grain production in our country from year to year, increasing productivity are analyzed. The culture of grain growing is improving, the selection work aimed at creating new, high-yielding wheat varieties adapted to the complex climatic conditions of the republic is improving, the quality and consumption characteristics of the grown grain are significantly increasing.

Today, we can all see in the example of the grain sector the enormous effect of the reform of production and property relations in the countryside, the stimulation of peasant labor.

One of the important indicators in the changing and complex soil and climatic conditions of the country is the creation of high-yielding, high-quality, disease-resistant and pest-resistant varieties of cereals, the development of seed production, the development of agronomic techniques for obtaining high quality grain from cereals in different soil and climatic conditions.

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Improving the well-being of the population requires meeting the demand for grain products, the inclusion of grain products in the list of exported products, the dedication of scientists and experts in the field to develop this industry.

It is no coincidence that the words of the President "There is such an unparalleled and great wealth, a great and sacred blessing in the world, the value of which can not be measured by anything" were emphasized about the sacredness of bread.

In this regard, the improvement of grain cultivation technology by our hard-working farmers, the provision of the plant with radically local nutrients, the implementation of irrigation regimes 4-5 times, the timely application of fertilizers such as nitrogen and potassium, urea are the factors to increase productivity.

Many years of scientific research have shown that in many regions of the country the grain yield in weakly saline soils is 15-20% lower, in moderately saline soils 30-50%, in strongly saline soils 70-80%. Therefore, the improvement of land reclamation is an important factor that creates the conditions for a sharp increase in crop yields.

In solving economic problems in the country, as in all areas, the grain processing industry plays an important role in the production of high quality grain products, the effective use of modern technologies. The national economy faces the task of developing technology in the food industry. The production of flour, cereals and mixed fodder products depends on meeting the needs of the population in these products, the prospects of grain storage and processing enterprises. In particular, the improvement of equipment and technology of flour production, the production of quality flour products from grains is a topical issue today.

Bread has long been the basis of human nutrition. Therefore, grain processing plays an important role in increasing food resources in the flour production community.

Grain is the most precious and unique blessing given to man. It is the food of our people, the precious raw material of our sacred bread, which is the beauty of our table. Growing and processing grain has been an important part of human life since ancient times. Grain is also a natural source of starch, protein, vitamins and other biologically active substances that are constantly needed for the needs of living organisms. Harvesting, storage, processing and delivery of high-quality finished products to consumers without destroying them requires the rational use of modern science and technology, the ability to use modern equipment and technology in the right place.

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Foods made from whole grains, such as bread, cereals, pasta, etc., are important consumer goods necessary for human life. Grains and seeds of cereals play a very important role in human life and in the livestock sector.

Studies on food consumption around the world show that 50% of protein, 70% of carbohydrates and 15% of fat are derived from grains and seeds. Centuries of experience around the world show that grain storage is a big and complex task.

Despite the shortage of grain and grain products on earth, much of them perish during storage and as a result do not reach human demand.

Improving the efficiency of grain use and improving product quality is the most important process for the flour milling industry. The technology of grinding wheat flour has a long history and is constantly evolving. Modern principles of organization and management of grain cleaning and grinding department processes of mills have their own scientific evidence.

In the course of our research, high-grade flour was obtained in mills from 76-72% of grain, but the mass fraction of kernel in wheat grain averaged 82-85%.

This was achieved by a full analysis of the technological properties of grain processed in flour mills in Uzbekistan and a full study of the processes of preparation and grinding using modern technological equipment.

According to the results of the study, local wheat grown in 2017-2019 was prepared from grain accepted in class III-IV according to some norms adopted for commercial grain.

According to the batch of grain delivered to the mill, the moisture content of the grain formed up to 8-12%, the glass content is 740-820 g/liter, the weight of 1000 grains is 38-40 g, the ash content is 0.55-1.25%, the gluten content is 28-30%.

In the study of the quality of products produced in the mill, the protein content was 12-14%, flour yield was 75-76%, flour moisture content was 14-14.5%, gluten content was 28-30%, bread lifting capacity was 400-600 m^3.

Flour production in all operating mills in Kashkadarya region currently stands at 76%.

Experiments have shown that sowing seeds at a relatively early stage, ie in the second half of September, has a positive effect on grain quality.

Due to the lack of effective temperature, the seeds do not germinate fully, the weeds increase in the field due to the sparse vegetation, the plant does not have time to enter the accumulation phase of development until the first frost, the plant lags behind in growth and development, flowering, harvest in the second half of May to corresponding

ISSN: 2776-0987 Volume 2, Issue 5, May, 2021

to the beginning of the June. During this period, some days when the temperature is above 30° C has a negative impact on grain formation, grain quality deteriorates significantly.

In order to properly choose the norms of sowing of local wheat grown in the conditions of the Republic of Uzbekistan and to take care of the sown grains and get a quality crop, it is important to properly organize agro-technical measures, apply field weed control measures.

It is important to adhere to the conditions of harvesting, improve storage conditions, increase the number of modern grain warehouses, increase the yield of high-quality flour, innovate in flour production processes, build modern mills, attract key specialists for the industry.

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