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Research Progress on Cultivation Techniques of Selenium-Rich

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Abstract
With the increasing attention of people to healthy diet, the cultivation technology of selenium-rich rice, as an important agricultural production method, has attracted much attention and research. Selenium is an essential trace element, which has important biological functions and is of great significance to human health. By optimizing the soil environment and improving the planting methods, the cultivation technology of selenium-rich rice can make rice absorb selenium in the soil and increase the selenium content of rice, which provides an effective selenium supplement method for people. Firstly, the nutritional value of selenium-rich rice was analyzed. Secondly, the cultivation technology of selenium-rich rice was explored, including the selection of planting site, seed selection and treatment, and timely sowing. This paper aims to provide reference for researchers and agricultural producers in related fields, promote the further development and promotion of Se-enriched rice technology, and provide people with safer and healthier agricultural products and diet choices.

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Keywords: Selenium rich rice; Rice cultivation; Cultivation technique

1. Introduction
The application of selenium enriched rice cultivation technology not only has a positive role in promoting agricultural production, but also has a profound impact on people's healthy life. By exploring the cultivation technology of selenium-rich rice, we can deeply understand its adaptability in different soil environments, its influence on rice growth and development, and the characteristics of selenium enrichment in rice, so as to provide scientific basis and technical support for further popularization and application.

2. Choice of planting site
The success of the cultivation technology of selenium-rich rice depends on the choice of planting land. The selection of planting site has a crucial effect on the growth, absorption of selenium, final yield and quality of Se-rich rice [1]. When choosing planting site, it is necessary to consider the selenium content of soil, soil acidity, topography, climate conditions and other factors. First of all, choose a soil rich in selenium as a planting site. Selenium rich soil is the basis of successful cultivation of selenium rich rice, because selenium in soil is the main source of selenium absorption and enrichment of rice. High quality selenium-rich soil usually has the characteristics of moderate soil pH, rich organic matter and active microorganisms, which is conducive to the absorption and accumulation of selenium. Secondly, the acidity and alkalinity of the soil should be considered. Selenium rich rice has certain requirements for soil acid alkalinity, and generally alkaline soil is more conducive to the growth of selenium rich rice. Acidic soil is easy to reduce the activity of selenium, affecting the absorption and accumulation of selenium, so it is necessary to choose a moderate pH or slightly alkaline soil. Topography is also an important consideration in the selection of planting land. The flat terrain is conducive to irrigation and drainage of rice, and is conducive to the growth and development of rice.

3. Seed selection

Seed quality directly affects the smooth progress of the whole planting process and the final yield [2]. Therefore, detailed research and practical inquiry are needed in seed selection and treatment. First, the choice of seeds is crucial. High quality seeds are the basis for successful cultivation of Se-rich rice, and good varieties with high yield, high resistance, strong adaptability and high resistance to diseases and insects should be selected as seeds. At the same time, it is necessary to choose a regular seed company or planting base with reliable seed sources and quality assurance to ensure the purity and quality of the seeds. Secondly, proper seed treatment is the key to ensure the growth and development of Se-rich rice. Before sowing, a series of treatment measures can be taken, such as seed soaking, sterilization, drying, etc., to improve the survival rate and emergence rate of seeds. Soaking can promote seed germination, sterilization can prevent soil-borne diseases, and drying can prevent seed deterioration. At the same time, it can also carry out seed selection, selection and other operations to remove diseases, pests and deformed seeds to ensure the health and quality of seeds. In addition, seed treatment technology can also be used to enhance the resistance and growth ability of seeds.

4. Timely sowing

Timely sowing involves not only the growth conditions of seeds, but also the climatic environment and soil conditions, so it needs to be analyzed and explored in detail. First of all, the timing of sowing needs to be determined according to the local climatic conditions and the characteristics of rice varieties. Climate factors such as temperature, precipitation and sunshine, as well as the growth cycle and characteristics of rice varieties should be considered when selecting the sowing time. Generally speaking, the sowing time should be selected in the season with suitable temperature, abundant precipitation and sufficient sunshine, which is conducive to the germination and growth of seeds and the strong of seedlings. Secondly, timely sowing also needs to consider the soil moisture and moisture content. Rice is a water-loving crop, so you need to make sure the soil has enough water, but not too wet, before sowing. Soil that is too wet will affect the germination and growth of seeds, while soil that is too dry will affect the growth of seedlings. Therefore, it is necessary to test and regulate the soil moisture before timely sowing to ensure that the soil moisture is suitable. In addition, timely sowing also needs to consider local rice growing habits and management measures. The choice of planting time may vary from region to region, and the best planting time needs to be determined based on local planting experience and management practices. At the same time, it is also necessary to take into account the seasonal changes of rice growth and development and climate change, and flexibly adjust the sowing time to adapt to different growing environments and management needs [3].

5. Conclusion

The practical research on the application of selenium-rich rice cultivation technology not only enrichis the way and means of agricultural production, but also provides a healthy diet choice for people. It is hoped that more scientific research institutions and agricultural producers can participate in the research and practice of Se-enriched rice cultivation technology in the future, and jointly promote the development of this technology, and make greater contributions to human health and sustainable agricultural development.

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