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DEVELOPMENT OF RICE VARIETIES ON SALINE SOILS

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Abstract
This article discusses the development of rice varieties on saline soils.

Keywords: rice, variety, salt, soil, import, development.

Introduction

Rice is one of the most important grain crops as it is consumed by more than half of the world's population. Rice already plays an important role in the ceremony instituted by the Chinese Emperor. The reigning emperor had to plant it himself, while the other four types of plants could be planted by the princes of the imperial family. However, the classic country for growing rice is India, where the rice culture, perhaps not as ancient as in China, covers large areas and the grains of this plant are the main food product of the population. Due to the heat-loving nature of rice, it has limited distribution in temperate countries. For its full development, an average summer temperature of 22-30°C and a growing season of 150 days are required, from 3300 to 4500 (multiplied by the number of days of the entire growing season of the plant before ripening). the average temperature during this period is 30;3300=150×22). Another reason is that in the special conditions of rice cultivation, it, like the marsh plant, requires a lot of stagnant water, so rice fields can easily become waterlogged if they are under water for a long time (90-100 days). causing periodic outbreaks of fever, as well as massive losses of water, a scarce resource in some countries. The main variety of this plant grown in many countries is water-rich or wet rice. Each hectare planted with wet rice requires twice as much water as winter crops and five times as much water as spring crops. Of the European and American varieties, more or less ordinary rice, Carolina, Piedmontese, etc. are known. In the East, more varieties of rice are grown, and the grains are more colorful; available in red, black and purple; Among them, red rice is the most nutritious. Many varieties of short grain rice are grown in Japan, Java, Sumatra and the Cochin Islands in China. Along with wet rice, sublime or dry rice

is grown in the east. At home, this rice grows wild on the mountain slopes of southern China and completes its growth without artificial irrigation during tropical rains. Practice in growing dry rice in northern Italy, for example, has shown that although it cannot be grown without artificial irrigation, the amount of water required to irrigate this variety of rice is almost half that of ordinary wet rice. Commercial varieties of rice: Carolina (elongated grains, odorless, white, transparent); Piedmontese (grains with a yellowish tint, shorter and rounder, unclear); Indian (elongated, transparent grains); Japanese (the grains are very small, but white and of good quality). The development of rice varieties on soils with different levels of salinity and salinity in the world was studied by M. Kremzin, I. E. Belousov, V. A. Popovlar in the Krasnodar Territory, Mai Nguyen Thi, Tan Hoang Minh, Te Nguyen Huu in the Krasnodar Territory. Socialist Republic of Vietnam, India Department. Scientists from the University of Genetics Sangam Shubhada, Kavi P.B., Catholic de Louvain, Louvain-la-Neuve, Ndayiragie A., Lutts S. in Belgium, Chen Li-Men, Kao Ching Hiei in China conducted extensive research at Osmania University and Hyderabad 7 regions went and certain results were achieved. In the direction of creating breeding varieties N.I.Kosareva, E.I.Svezhakova, P.A.Pulina, S.Rikhsieva, T.E.Iskhakova, T.Boboniyazova, T.Asilova, U.Abilaeva, Kha.A.Baraeva , on the study of salinity. The stability of competitive, high-yielding rice varieties created in our republic has been partially studied. B.G. Kadyrov conducted scientific research on the resistance of local rice varieties to various soil salinities and technologies for their optimal placement, which were created in our country and introduced for large-scale plantings. However, studies on the selection of initial sources for assessing the salt tolerance of foreign rice varieties at different levels have not been carried out, and the soil and climatic conditions of the Khorezim region have not been studied. 0.01% unsalted Cl ion among early early “Nukus-2”, China-2, “KS-2022.2”, mid-early Vietnamese 1.1, “Iskandar”, Sanet.2 and late early GG-2022.2, “Lazurny”, rice varieties OLM-2022.2 in soil conditions with a SO4 ion content of less than 0.3%, it was found that the number, length and weight of parts forming the crop were the highest in the Iskandar medium and Kechpishar varieties. “Variety OLM-2022.2

2. Early ripening varieties “Nukus-2”, “KS-2022.2” and mid-ripening varieties “Iskandar” in the 5th and 9th variants of the experiment with the content of Cl ions above 0.2% and SO4 ions above 3.0% on highly saline soils soils, although the elements of the crop were able to develop, but the parameters were the lowest, there were very large differences between varieties, mid- and late-ripening rice varieties did not germinate, and even in the “Azure” variety, which germinates, parts of the crop do not develop and even the plants dry out, rice only It was established that the early variety China-2 grew satisfactorily and was the highest in terms of components included in the crop.

3. In the soil composition of the experiment, Cl ion is less than 0.01%, SO4 ion is less than 0.3%, i.e. in the 1st control option without salt, all rice varieties give a yield of 54.0-81.7 c/ha in accordance with their biology, among the varieties the highest indicator is for the early variety China-2 62.8 c/ha, for the mid-early "Iskandar" » 75.2 c/ha, and for late-ripening varieties GG-2022.2 and OLM-2022.2 79.4. It turned out that -81.7 c/ha.

4. Studies have established the highest yields in the 4th and 8th options with high salinity (0.1-0.2% Cl ion in the soil) and 2.0-3.0% SO4 ion in the early Chinese variety -2. It should also be

noted that as soil salinity levels increase, rice grain yield decreases. Experience has shown that the early variety Chinese-2 can produce the best yield on highly saline soils (soils with a Cl ion content above 0.2%) of the 5th and 9th variants with a SO4 ion content of 3.0%, as well as other early, medium and that none of the late-maturing rice varieties can produce good yields, and late-maturing rice varieties are less tolerant of soil salinity than early-maturing rice varieties.

5. In the experiment, compared with the control option, the degree of soil salinization with chlorine ion is weak 0.01 - 0.03%, average 0.03 - 0.1%, strong 0.1 - 0.2% and very strong above 0. 2% in the second, third, fourth and fifth options, the amount of amylose in the grain increases to 0.2-1.0%, glassiness to 0.2-1.5%, looseness to 0.1-1.4%, rice yield and the yield of whole rice, on the contrary, as the salinity level increased, the indicators decreased to 1.5-2.3%.

6. It was found that there is a high degree of correlation between the number of productive stems and the yield of rice varieties per 1 m2 of area, and the correlation coefficient was equal to r = 0.863.

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