

The Effect Of Mineral Fertilizers On The Growth Period Of Rickets

Abduazimov Akbar Mukhtorovich

(PhD), senior researcher, Southern Agricultural Research Institute

Urinova Gulnora Ernazarovna,

Researcher

Kurbanaliev Fazliddin Jora oglu,

Student of QMII

Annotation: A large amount of consumer oil is currently imported into the country from abroad, which in turn leads to high import prices. To provide the population with cheap and high-quality oil products, it is necessary to increase the cultivation of oilseeds in the country, to improve the technology for the production of oils and their introduction into production.

None of the agro-technical measures applied to agricultural crops affect the yield until the time of sowing the seeds. Also, a template cannot be adopted to select the planting dates for each crop, but in any case the planting dates must be determined. The choice of planting dates depends on the specific conditions of the season and the biological characteristics of the plant.

The growth period is the sum of the time intervals required for individual stages of ontogeny to pass. The rate of transition from each stage is determined by genotype and environmental conditions: temperature and humidity. The decrease in the amount of heat for the passage of the number of phases in the ryegrass plant is due to the acceleration of plant growth during these periods as the temperature rises. The decrease in the length of the days is explained by the fact that the plants develop at average daily high temperatures during subsequent planting. As noted above, the amount of heat required to pass through the phenological phases is reduced.

Autumn ryjik belongs to the group of plants that ripen relatively early. The duration of its vegetation period depends on climatic conditions [7, p. 84]. The development cycle is 291-320 days, taking into account the winter dormancy period. Its spring-summer development ends in 77-91 days. To complete the full development cycle, ryjik accumulates temperatures of 1580 - 1790 degrees, and in this respect spring barley is a plant close to flax [1, p. 483]. Autumn ryjik is very resistant to frost. Its seeds begin to germinate at a temperature of 1-2 °C, but require a temperature of 10-12 °C for full germination. According to some data, the young ryzhik plant tolerates autumn and winter frosts down to -20 °C [6].

In the absence of moisture, the period of rye growth is shortened to 15 days or more, which leads to a decrease in yield and fat content [8, p. 93; 9, 180-b]. However, according to other scientists, autumn ryegrass is more drought tolerant and consequently more productive compared to mustard and flax [6]. When talking about the biological properties of autumn ryjik compared to spring, it is impossible not to pay attention to its advantages. According to the literature, autumn ryjik uses the first maximum moisture in the soil, better tolerates spring-summer drought, and as a result ripens 10–13 days earlier. [3, 56-p; 4, 67-p; 6].

Abdullina, Ya. B. B. (2015) assessed the impact of meteorological factors on the duration of the growing season in the study of autumn ryjik collection samples, noting that the vegetation period is an important biological feature of plants, determines their suitability for cultivation in a particular region and is of great interest for both production and selection [2, 11 -b]. T.Ya.Prakhova, V.A.Prakhov (2015) noted that the conditions of autumn ryzhik cultivation: lack of heat, precipitation above normal, average daily high temperatures and soil-air drought significantly affect its vegetation period. In the autumn ryzhik varieties studied in the study, the average duration of the vegetation period was 290-316 days. In addition, specimens of different ecotypes were distinguished by their early maturity: Kozyr, Penzyak (Central Russian ecotype); k-1357 (Western Europe); k-3290 (Siberian ecotype); k-1553 and k-2283 (Southern ecotype) The duration of the “germination-ripening” period was 290–305 days [5, p. 324].

The effect of mineral fertilizers on the growth period of ryzhik varieties in the conditions of light gray soils of Kashkadarya region was analyzed. According to the data obtained, the autumn ryzhik ripens 2-3 days later than the Penzyak variety Karat navigator (Fig. 1)

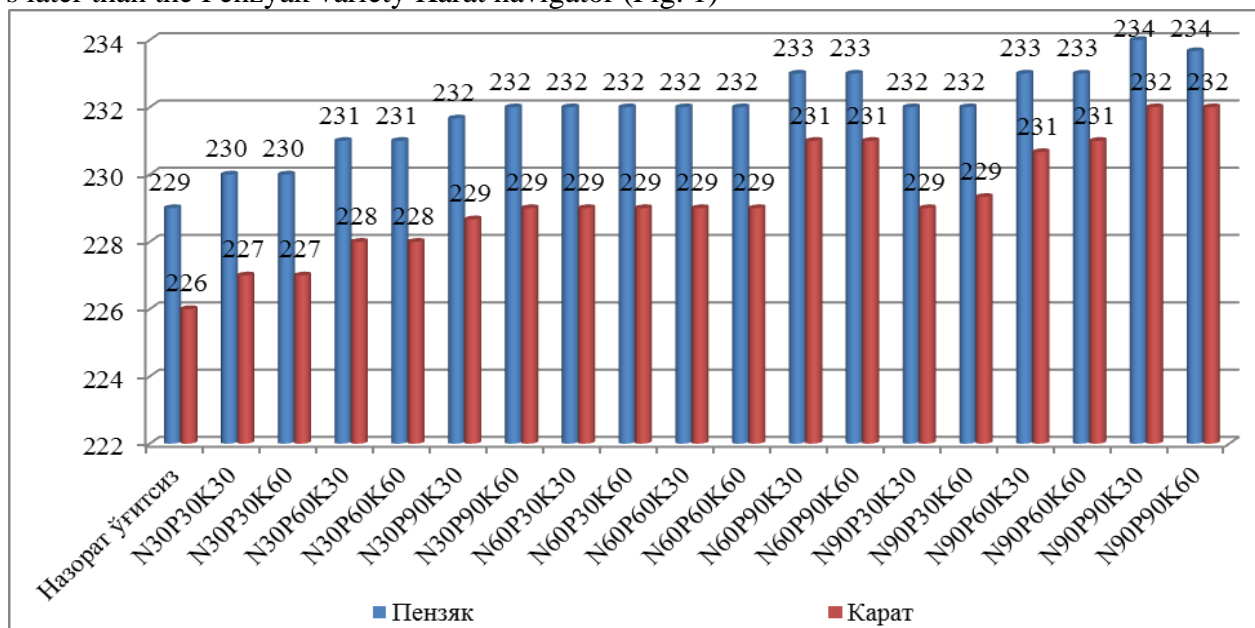


Figure 1. Influence of mineral fertilizers on the growth period of rye varieties

The growth period of autumn varieties was 229 days for variety and 226 days for Karat variety without mineral fertilizers, NPK was 230-227 days for 30 kg / ha and 232-231 days for 60 kg / ha.

When nitrogen was applied at a rate of 30 kg / ha and phosphorus was exceeded at 30 kg / ha, the plant growth period increased by 1 day. Conversely, no change was observed during growth when phosphorus was applied from 30 kg / ha and nitrogen was increased from 30 kg / ha. When phosphorus was increased to 90 kg / ha, it was noted that autumn ryzhik varieties ripen in the longest (234) days.

In summary, increasing the phosphorus fertilizer rate to 30 kg / ha for autumn ryzhik varieties increases the plant growth period by 2-3 days, and increasing the nitrogen fertilizer rate by 30 kg / ha for every 30 kg / ha. It was noted that the increase in potassium fertilizer rates did not affect the growth period of the plants.

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