Agrotechnology of Cotton Seeding and Processing

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A B S T R A C T

The vital activity of plants is controlled by a number of stimulants. This system includes cells, tissues, organs, and groups of whole organisms. Compounds that have hormonal properties in higher plants are important in interconnecting such a complex control system.

R T I C L E I N F O

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Introduction: The whole life of a plant, from fertilization to egg development to aging, depends on the action of phytohormones. Today, along with cotton, the factor of increasing the yield and improving the quality of other agricultural crops, especially cereals and cereals, is an important task for agricultural workers.

Main part: In our study, we observed the effect of hydrogel on the growth and development of cotton grass, as well as the retention of moisture in the soil. We used a 10% solution of hydrogel to determine the germination of cotton seeds. To study the effect of cotton seeds on the early stages of germination and growth, we took 100 identical seeds and put them in a flask. A day later, the filter paper was placed in a Petri dish to collect.

The results obtained on the effect of hydrogel on the fertility of the wheat variety "Yuna" showed that the hydrogel accelerated the germination of wheat and cottonseed.

A 10% solution of hydrogel was used in the study. The best seeds of cotton, An-13, S-6524, Namangan-77 were selected for the study. 100 seeds of An-13, S-6524, Namangan-77 varieties were counted in clean dry flasks. Two seeds of each variety were placed in tubes. The first tube was placed in a thermostat at 250 C by adding a 10% hydrogel solution to the tube containing the seeds for control and experimenting with the second tube.

The seeds are stored in these flasks for a day, then the seeds, which have begun to germinate by placing a filter paper under the clean petri dishes, are taken into these petri dishes and spread with wet filter paper on top. The purpose of placing filter paper on the bottom and top of the petri dishes is to keep the moisture evenly for the germinating seeds to grow well. From that day on, all the seeds that were beginning to flour were watered in moderation. The following results were obtained by measuring the degree of germination and growth rate of cotton seeds.

Grass growth (cm) of cotton varieties An-13, S-6524, Namangan-77 under the influence of water and hydrogel is shown in the table below.

Пахта навлари		6-кун	7-кун	8-кун	9-кун	10-кун
Ан-13	Назорат	2,1	2,5	2,9	3,2	3,6
Ан-13	тажриба	2,4	2,9	3,3	3,6	4,2
Наманган 77	назорат	1,9	2,2	2,5	2,8	3,2
Наманган 77	тажриба	2,3	2,7	3,1	3,5	3,9
С-6524	назорат	2,0	2,3	2,7	3,1	3,4
С- 6524	тажриба	2,3	2,8	3,1	3,4	4,1

According to the results, on the sixth day, the growth of An-13 under the influence of hydrogel was 2.4 cm, the growth under the influence of water was 2.1 cm. On the seventh day, the growth of An-13 variety under the influence of hydrogel was 2.9 cm, and the growth under the influence of water was 2.5 cm. On the eighth day, the growth of An-13 variety under the influence of hydrogel was 3.3 cm, and the growth under the influence of water was 2.9 cm. On the ninth day, the growth of An-13 under the influence of hydrogel was 3.6 cm, and the growth under the influence of water was 3.25 cm. On the tenth day, the growth of An-13 variety under the influence of hydrogel was 4.2 cm, and the growth under the influence of water was 3.6 cm.

According to the results, on the sixth day, the growth of Namangan 77 varieties under the influence of hydrogel was 2.3 cm, the growth under the influence of water was 1.9 cm. On the seventh day, the growth of Namangan 77 varieties under the influence of hydrogel was 2.7 cm, and the growth under the influence of water was 2.2 cm. On the eighth day, the growth of Namangan 77 varieties under the influence of hydrogel was 3.1 cm, and the growth under the influence of water was 2.5 cm. On the ninth day, the growth of Namangan 77 varieties under the influence of hydrogel was 3.5 cm, and the growth under the influence of water was 2.8 cm. On the tenth day, the growth of Namangan 77 varieties under the influence of hydrogel was 3.9 cm, and the growth under the influence of water was 3.2 cm. According to the results, on the sixth day, the growth of S-6524 under the influence of hydrogel was 2.3 cm, the growth under the influence of water was 2.0 cm.

On the seventh day, the growth of S-6524 under the influence of hydrogel was 2.8 cm, and the growth under the influence of water was 2.3 cm. On the eighth day, the growth of S-6524 under the influence of hydrogel was 3.1 cm, and the growth under the influence of water was 2.7 cm. On the ninth day, the growth of S-6524 S-6524S-6524 under the influence of hydrogel was 3.4 cm, and the growth under the influence of water was 3.1 cm. On the tenth day, the growth of S-6524 under the influence of hydrogel was 4.1 cm, and the growth under the influence of water was 3.4 cm. In summary, an acceleration in the growth of cotton grass was observed under the influence of the hydrogel.

The hydrogel supply to the plants affects their development. In our experiment, a small dose of hydrogal (10%) had a positive effect.

During the study, it was found that the lack of hydrogel in the nutrient solution slowed down the development of cotton. Hydrogel increased spring wheat and cotton yields. In the districts, the hydrogel has increased the yield of winter wheat. Studies have shown that the optimal dose of hydrogel affects agricultural plants in different, soil, climatic zones. The optimal dose of hydrogel with 10% solution had a positive effect on wheat grains. The resulting plants were found to absorb hydrogel as a result of short 10-hour experiments.

Conclusion: A 10% solution of hydrogel had a positive effect on the germination of cotton seeds relative to control, as well as a 10% solution of hydrogel accelerated the growth of cotton seedlings in height and width. The study of the effect of hydrogel on the growth, development and yield of cultivated plants is one of the first studies, and the study of its chemical composition and mechanisms of influence on the physiology and yield of plant growth will yield positive results in the future.

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