MODERN MEDICINE AND PRACTICE
https://inovatus.es/index.php/ejmmp
EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE
Vol. 3 No. 12 (Dec - 2023) EJMMP ISSN: 2795-921X

THE EFFECT OF THE HARMSEL FACTOR ON THE LEVEL OF COTTON LEAVES FROM VARIOUS STRESSORS

Ostonova Gulnoza Rashidovna
Teacher at Asian International University

Abstract: This article determines the influence of the dry wind factor on the change in the leaf surface of cotton varieties Bukhara-8 and Bukhara-10 in laboratory conditions. The studies were carried out in different periods of vegetation of varieties Bukhara-8 and Bukhara-10. As a result, at the end of the growing season, the level of leaves in the options Bukhara-8 and Bukhara-10 is respectively: 2425 cm2; It turned out to be equal to 2778 cm2.

Key words: cotton variety Bukhara-8, cotton variety Bukhara-10, leaf level, harmocyte.

The global climate changes observed worldwide, i.e. the increase in air temperature in the biosphere, a sharp decrease in relative humidity, the occurrence of the greenhouse effect and other reasons, cause a number of difficulties in the production of agricultural crops.

Due to the salinity of the meadow-alluvial soils of the Bukhara region, the dry and very hot weather, the low amount of precipitation, and the high rate of transpiration in plants, there are many crops grown in agriculture. Requires watering. Hot and dry wind (harmsel) occurs in late June and early July, and this period often coincides with the flowering stage of agricultural crops.

A large amount of water evaporates from the body as soon as the plant root absorbs the water in the soil during summer. If this critical phase coincides with the flowering period of plants, it causes the loss of crop elements in plants and their death. As a result, it leads to a decrease in productivity. For this reason, cultivation of cotton varieties resistant to the effects of such adverse stress factors is considered one of the urgent issues.

Bukhara-8 and Bukhara-10 cotton varieties grown in Bukhara region were selected as the research object. Experiment In the laboratory of the Department of Botany and Plant Physiology of Bukhara State University, the effect of artificially generated hot wind (harmcell) on the leaf surface of Bukhara-8 and Bukhara-10 cotton varieties was determined, and the control (stress factor effect unencrypted) were studied in comparison with the options. The experiment was carried out 3 times with 4 returns. The effect of garmsell on the leaf surface in different vegetation periods of cotton N.N. It was determined by the Tretyakov method . In this case, the surface (cm^2) of the leaves taken from the plant samples consisting of 25-10-10 and 3 pieces of cotton was calculated and averaged in different growth phases of cotton according to the section of options.

According to the results of the research, the average amount of the leaf surface from the first to the fourth variant in the period of 2-4 leaves is respectively: 390 cm^2, 375 cm^2; 415 cm^2; It was 395 cm^2. The most positive result was observed in the Control-2 variant, and it was found that the leaf surface was 25 cm^2 more than the Control-1 variant.

The effect of garmsell on cotton leaf surface from various stress factors

T/r	Options	Leaf level of cotton in different vegetation periods indicators, cm^2			
		2-4 trinkets	Shonalash	Flowering	Ripe
1	Control -1	390	1605	1815	2508
2	Buxoro-8	375	1570	1745	2425
3	Control -2	415	1704	2015	2604
4	Buxoro-10	395	1678	1955	2778

When analyzing the results of the research conducted on the level of leaves during the flowering period, it was found that the level of leaves in the sections of Nozorat-1, Bukhara-8, Nazorat-2, Bukhara-10 variants is: 1605 cm^2, 1570 cm^2, 1704 cm^2, 1678 cm^2, respectively. . Among the experimental options, the most positive option was observed in the Control-2 option, and compared to the other options, it was determined that: 99 cm^2, 134 cm^2, 26 cm^2 of the leaf surface was more.

According to the results of the experiments conducted during the flowering period, in the variants Control-1, Bukhara-8, Control-2, Bukhara-10, respectively: 1815 cm^2; 1745 cm^2; 2015 cm^2; It was 1955 cm^2. At the end of the cotton vegetation, i.e. in the ripening phase, when the leaf level was determined in the Control-1, Bukhara-8, Control-2, Bukhara-10 variants, the most positive result was observed in the Control-2 and Bukhara-10 cotton varieties.

Based on the results presented above, the following conclusions can be made: Garmsel factor slows down the activity of apical and intercalary meristem cells, which carry out the growth and development of leaf cells. Therefore, it was found that the leaf area was significantly reduced in the experimental variants compared to the control.

The process of photosynthesis takes place in the chlorophyll grains in the leaf. The color of the leaf is dark green and the large surface ensures the acceleration of the photosynthesis process and high economic and biological yield.

Garmsell is one of the stressors that are often observed in the conditions of Bukhara region. From a physiological point of view, it is advisable to plant Bukhara-10 cotton variety in order to obtain a high and high-quality harvest in cotton fields.

REFERENCES:

1. Rashidovna, O. G. (2023). PHYSIOLOGY OF THE ENDOCRINE GLANDS. EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE, 3(11), 1-2. Ostonova, G. (2023). TURLI XIL STRESS OMILLARDAN GARMSEL OMILINING G ‘O ‘ZA BARG SATHIGA TA’SIRI. Центральноазиатский журнал образования и инноваций, 2(11 Part 2), 107-111.
2. Rahimova, G. (2023). QISHLOQ XO'JALIGIDA BENTONITDAN FOYDALANISHNING ILMIY JIHATLARI VA SAMARADORLIGI.B CENTRAL ASIAN JOURNAL OF EDUCATION AND INNOVATION (Т. 2, Выпуск 11, сс. 189–196).Zenodo.
3. Ostonova, G. (2023). ICHKI SEKRETSIYA BEZLARI FIZIOLOGIYASI. Центральноазиатский журнал образования и инноваций, 2(10 Part 3), 110-115.
4. Ataullayeva, M. (2023). COMMUNICATIVE COMPETENCE AS A FACTOR OF PERSONAL AND PROFESSIONAL DEVELOPMENT OF A FUTURE SPECIALIST. International Bulletin of Medical Sciences and Clinical Research, 3(10), 109-114.

5. Narzulaeva Umida Rakhmatulloevna, Samieva Gulnoza Utkurovna, & Ismatova Marguba Shaukatovna (2020). SPECIFICITY OF THE CLINICAL COURSE OF THE INITIAL STAGES OF HYPERTENSION IN ARID ZONES OF UZBEKISTAN AND NON-DRUG APPROACHES TO TREATMENT. Кронос, (4 (43)), 15-17.
6. Axmedova, M. (2023). THE IMPACT OF SOCIOCULTURAL
7. PERVASIVENESS OF DENTAL CARIES AS A COMPLEX HEALTH CONDITION IN CONTEMPORARY SOCIETY. International Bulletin of Medical Sciences and Clinical Research, 3(9), 24-28.
8. Djalilova, Z. (2023). THE USE OF LATIN TERMINOLOGY IN MEDICAL CASE. Академические исследования в современной науке, 2(14), 9-15.
9. Obidovna, D. Z., & Sulaymonovich, D. S. (2022). Physical activity and its impact on human health and longevity. Достижения науки и образования, (2 (82)), 120-126.
10. Караматовна, М. А. (2023). ФОРМИРОВАНИЕ В ЯЗЫКОЗНАНИИ ТЕОРИИ СЕМАНТИЧЕСКОГО ПОЛЯ. Мусаева, А. (2023). РУССКИЙ ЯЗЫК В МЕЖКУЛЬТУРНОЙ СРЕДЕ. Современная наука и исследования, 2 (4), 182–186.
11. Ergasheva, G. (2023). METHODS TO PREVENT SIDE EFFECTS OF DIABETES MELLITUS IN SICK PATIENTS WITH TYPE 2 DIABETES. *InternationalBulletinofMedicalSciencesandClinicalResearch*, *3*(10), 104-108.