CHARACTERISTICS OF WATER EXCHANGE IN THE PHASE OF WAX MATURATION OF VARIETIES

Abstract: it has been learned features of water exchange during the wax ripeness phase of wheat varieties in soil climatic condition in Surkhandarya region.

Key words: Wax ripeness, triticum v. growth, development, number of grain, transpiration, ecological factors.

Language: English

Citation: Kodirova, D. N. (2020). Characteristics of water exchange in the phase of wax maturation of varieties. ISJ Theoretical & Applied Science, 11 (91), 518-520.

Introduction

UDC 633.113.1

Water is undoubtedly the most important substance for the life of living organisms. Thanks to water, plants receive the necessary nutrients. Water forms the main part of plants, and they play an important role in life activity. [4]. The role of water in the life of plants, consists of water 70-95% of the content of plant tissues. In all organs of the plant there will be water: in the Leaf-90%, in the branch-70-80%, in the root-50-60%, in the seed-10%, in the vacuole-98%, in the cytoplasm-80%, in the shell-about 50% water threaydi. In some wild fruits very much: in the tomato-94%, in the watermelon-up to 92% will be water [1,3].

Proceeding from the above information, we have reaped the water-exchange characteristics of bug'doy varieties, according to their phases of growth and development.

1.1 table.

| №  | Sorts  | total amount of water in % | the intensity of transpiration g/m² | water deficit % | ability to hold water % |
|----|--------|---------------------------|-------------------------------|----------------|----------------------|
| 1  | Andijan-1 | 75,6                       | 23,6                           | 5,33±0,02     | 6,5±0,01             |
| 2  | Andijan-2 | 76,1                       | 22,2                           | 5,26±0,04     | 6,3±0,04             |
| 3  | Asr     | 76,9                       | 21,5                           | 4,41±0,05     | 6,2±0,05             |
| 4  | Omad    | 79,4                       | 21,1                           | 3,87±0,03     | 6,8±0,04             |
| 5  | Grom    | 80,6                       | 19,4                           | 3,65±0,03     | 5,6±0,01             |
| 6  | Tanya   | 83,6                       | 17,6                           | 2,89±0,06     | 4,5±0,03             |

From the information presented in the table, it becomes clear that all varieties studied differ from each other in their water-exchange properties. If the total amount of water in the leaves is 75,6% g of top in Andijan 1 variety, 76,1% g of top in Andijan 2 Variety, it was found that it is 0,5% more than in Andijan 1 variety. In the leaves of the century-old Variety, the total amount of water is 76,9% gateng, it was observed that it is 1,3% more than in Andijan 1 variety.
It was observed that the total amount of water in the leaves of the Andijan variety was 79.4%, compared to Andijan 1 Variety was 3.8%. It was found that the total water content of the Chromium variety is 80.6% gat En, and Andijan is 5.0% more than 1. 83.6% of the tanyaoyoy variety is water, which is 8.0% more than the Andijon1 variety.

According to this data, it was determined that in relation to the amount of water in the leaves of the Andijan-1 bug’doy variety, water is the most abundant in the leaves of the Tanya navoy variety, and other varieties are intermediate.

The intensity of shrinkage that occurs in plant leaves is also one of the characteristics of plant water exchange. According to the data indicated in the table 1 table 3.5, if the leaves of Andijan 1 bug’doy varieties were polished 23.6 g of water during 1 hour at the level of 1 m2 leaves, 17.6 g of water evaporated from the leaves of Tanya navoy varieties within the same period, that is, in the same period Tanya navi polished 6.0 g. The remaining varieties also occupy intermediate places and polished less water than Andijan 1 grade, that is, Andijan 2 grade polished 1.4 g, Century Grade 2.1 g, luck grade 2.5 g, Chrome grade 4.2 g less water. This indicator shows that the varieties also differ sharply from each other in terms of the intensity of spinning.

Bug’d the water shortage in the leaves of the willow varieties also varies depending on the characteristics of the variety. If the water shortage in the leaves of the Andijan 1 Variety is equal to 5,33%, Andijan 2 varieties are equal to 5.26%, which is 0.07% compared to Andijan 1 varieties,0.92% in the centuries, 1.46% in the varieties of luck, 1.68% in the varieties of chromium and 2.44% in the varieties of Tanya. It was found that there is less water shortage compared to the leaves of Andijan 1 bug’doy variety.

Similar to the water shortage, the water storage capacity of its leaves is also the most important indicator of the degree of drought resistance of plants to harsher. If the water storage capacity of the leaves of Andijan-1 plant is the lowest in comparison with other varieties, and the amount of Water spent during 1 hour is equal to 6.5%, Andijan-2 plant spent 6.3% of water in the same period and the difference between them is equal to 0.2%.

The amount of water consumed from the leaves of cAsr navoy varieties is equal to 6,2%, it is less than 0,3%, if the leaves of the CaSR bug’doy varieties shine 5.8% water in the same term, Andijan shine 0.7% water compared to the 1 variety, Andijan shine 5.6% water in 1 hour, Andijan shine 0.9% water.

This data shows that the water storage capacity of the Andijan-1oyoy variety is the lowest, the water storage capacity of the Tanya navoy variety is the highest. The remaining varieties occupy an intermediate position in terms of water storage capacity. Thus, based on the water-exchange characteristics of the Andijan varieties, their level of drought resistance can be placed in the following order: Andijan 1 < Andijan 2 < Century < Amen < Chromium <Tanya that is, among the studied varieties, the drought resistance of Andijan 1 is the lowest, the drought resistance of Tanyaoyoy varieties is the highest and the remaining options are located in the

These data obtained in our experiment are described more clearly in 1.1. table.

The amount of water consumed from the leaves of the century-old variety is equal to 6.2%, it is less than 0.3%, if the leaves of the Amasya variety are polished by 5.8% water in the same term, Andijan 1 polished by 0.7 %, Andijan 1 polished by 5.6% water in 1 hour, Andijan 1 polished by

This data shows that the water storage capacity of the Andijan-1oyoy variety is the lowest, the water storage capacity of the Tanya navoy variety is the highest. The remaining varieties occupy an intermediate position in terms of water storage capacity. Thus, based on the water-exchange characteristics of the Andijan varieties, their level of drought resistance can be placed in the following order: Andijan 1 < Andijan 2 < Century < Amen < Chromium < Tanya that is, among the studied varieties, the drought resistance of Andijan 1 is the lowest, the drought resistance of Tanyaoyoy varieties is the highest.

References:

1. Vavilov, P. P. (1980). Silicryl. (p.630). Tashkent: Otoveci.
2. Amanov, A. A. (2005). Quality of grain of collection samples of wheat. "Uzbekistan Kishlok khuzhaligi" journal, no. 3, pp.16-17.
3. Amonov, M. A. (1978). Stability of wheat in Uzbekistan to unfavorable environmental factors. (p.92). Tashkent: Fan.
4. (2007). “O’similiklar fiziologiyasi” M.T.Sagdiyev, R.A.Alimova. “Yangiyul Poligraf Service”, Toshkent-2007 o’quv qo’llanma.
### Impact Factor:

| Journal | Impact Factor |
|---------|---------------|
| ISRA (India) | 4.971 |
| ISI (Dubai, UAE) | 0.829 |
| GIF (Australia) | 0.564 |
| JIF | 1.500 |
| SIS (USA) | 0.912 |
| ICV (Poland) | 6.630 |
| ПИИИ (Russia) | 0.126 |
| PIF (India) | 1.940 |
| ESJI (KZ) | 8.997 |
| SJIF (Morocco) | 5.667 |
| ОАЖИ (USA) | 0.350 |

5. Qodirova, D.N. (2020). The impact of the environment on growth and development of ginger (zingiber officinale) in the soil and climate conditions of surkhandary. *Nauka i mir, № 9 (85), Tom 1.*

6. Jabborova, D., et al. (2020). Isolation and characterization of endophytic bacteria from ginger (Zingiber officinale Rosc.) *Annals of Phytomedicine* 9(1): 116-121.

7. Egamberdieva, D., Jabborova, D., & Berg, G. (2016). Synergistic interactions between Bradyrhizobium japonicum and the endophyte Stenotrophomonas rhizophila and their effects on growth and nodulation of soybean under salt stress. *Plant and Soil*, 405(1):35-45.

8. Egamberdieva, D., Jabborova, D., & Hashem, A. (2015). Pseudomonas induces salinity tolerance in cotton (Gossypium hirsutum) and resistance to Fusarium root rot through the modulation of indole-3-acetic acid. *Saudi J. Biol. Sci.*, 2: 17-22.

9. Egamberdieva, D., Jabborova, D., & Wirth, S. (2013). *Alleviation of salt stress in legumes by co-inoculation with Pseudomonas and Rhizobium.* In: Plant-Microbe Symbiosis-Fundamentals and Advances, Editor: Arora, N. K. Springer, India, pp.291-301.

10. Egamberdieva, D., Jabborova, D., Stephan, W., Pravej, A., Alyemeni, M.N., & Parvaiz, A. (2018). Interaction of magnesium with nitrogen and phosphorus modulates the symbiotic performance of soybean with Bradyrhizobium japonicum and its root architecture. *Frontiers in Microbiol*, 9: 1-11.