Influence of different seeding dates on cotton yield

Bekzot IBRAGIMOV¹, Odiljon IBRAGIMOV²

Ministry of Agriculture of Uzbekistan
Fergana Polytechnic Institute

ARTICLE INFO

Article history:

Received March 2021
Received in revised form
20 March 2021
Accepted 15 April 2021
Available online
20 May 2021

Keywords:

conditions,
Fergana,
chemical,
yield,
chasing,
cotton,
drug,
yield,
growth.

ABSTRACT

In the conditions of Fergana region, Bukhara-8, Sultan and S-8290 cotton varieties were planted in six terms, and 11-12, 12-13, 13-14 cotton branches were chemically ginned by hand. The results of the variant with the highest yield Bukhara-8 cotton variety sown on April 20-25 and pruning on 12-13 harvest branches are given.

2181-1415/© 2021 in Science LLC.

This is an open access article under the Attribution 4.0 International (CC BY 4.0) license (<https://creativecommons.org/licenses/by/4.0/deed.ru>)

Paxta hosili bo'yicha turli xil urug'lik shartlarining ta'siri

ANNOTATSIYA

Kalit so'zlar:

shartlar,
Farg'ona,
kimyoviy,
hosil,
chetan,
paxta,
dori,
hosil,
o'sish.

Farg'ona viloyatida paxtaning Buxoro-8, Sulton va C-8290 navlari turli vaqtlarda (oltitadan) ekilgan va 11-12, 12-13, 13-14 simpodeal shoxlari hosil bo'lganda paxta qo'lda chetan qilingan. Maqolada ta'kidlanishicha, eng yuqori hosil 20-25-aprel kunlari Buxoro-8 navlari paxtasini ekish paytida olingan, ular chetan qilinganida, ularning simpodial shoxlari 12-13 ta hosil bo'lgan.

¹ Independent researcher, Ministry of Agriculture of Uzbekistan, Tashkent, Uzbekistan.

² Professor, Fergana Polytechnic Institute. Fergana, Uzbekistan.

E-mail: domuladjanovi@mail.ru.

Влияние разных посевных сроков на урожайность хлопчатника

АННОТАЦИЯ

Ключевые слова:

Условия,
Фергана,
химия,
урожай,
чеканка,
хлопок,
средство, у
рожай,
рост.

В условиях Ферганской области хлопчатник сортов Бухара-8, Султан и С-8290 были посеяны в разные сроки (шесть), а при образовании 11-12, 12-13, 13-14 симподиальных ветвей проводилась ручная чеканка хлопчатника. В статье отмечается, что наибольшая урожайность была получена при посеве хлопчатника сортов Бухара-8 в сроки 20-25 апреля, при их чеканке образовались 12-13 их симподиальных ветвей.

It is known that if the basis of any crop is yield, then the main task of any agro-technical measures will be to increase productivity. It should be noted that in the care of cotton, it is possible to achieve higher yields than expected when planting manure, seedling thickness and agronomic measures are carried out by man, if they are carried out in a timely manner. When chasing agronomic measures are taken, the growth of cotton stops, the nutrients from the soil are distributed to the yielding elements, and the yield increases due to the increase in the weight of the pods and their retention in more cotton bushes.

In the conditions of Samarkand region, the research conducted by O.Sh. Yuzbashyan F.X. Xamraev [1-8].

When examining the effect of weeding on the bedding of a cotton plant, it was found that the cause of plant bending is affected by the number of stalks along the plant and their location in the plant.

It has been shown that pruning plants is 2-3 times less bent than non-pruning plants and that pruning can be significantly reduced or eliminated by using agronomic techniques that allow the main stem to be strong and the stems to be located below [4].

In this regard, studies have been conducted to study the effect of chasing agronomic measures on cotton yield in late, middle and early cotton varieties depending on different sowing periods.

The research was carried out using the manuals "Methods of field experiments with cotton" (1981), "Methods of field experiments" (2007), adopted at UzPITI [1] were analyzed [2].

According to the results of research conducted in the Fergana region for 2017–2019, the highest yield of Bukhara-8 cotton varieties was sown on April 20 for an average of three years. The variant sown on April 25 and pruned on 12-13 harvest branches yielded 35.5 ts/ha, respectively. The lowest yield of seeds in this cotton variety was sown on April 10 and was obtained from the variant with 13-14 yielding branches, which revealed a lower yield of 4.4-3.3 ts/ha compared to the previous variant.

In the Sultan cotton variety, the highest yields were obtained from the variants of 12-13 and 11-12 twigs sown on April 20-25, and the average yield over the years was 33.4-33.7 ts/ha. It should be noted that the highest yield in 2018 was obtained when the seed was sown on April 20, while in 2019 the seed was obtained from the variant sown on April 25. This can be explained by the fact that depending on the climatic conditions of the year, high yields can be achieved by stratifying the sowing of seeds.

It was also noted that in this cotton variety, when the seeds were sown early, on April 10, the yield was low in all three years of the experiment. In the variant sown on April 10, the yield decreased by 2.8-3.1 ts/ha compared to the variant sown on April 20 and 25 (Fig. 1).

Figure 1. Influence of chasing on cotton yield depending on sowing dates in cotton varieties

Also, the highest yield of early maturing S-8290 cotton variety was sown on April 25-30, and the yield was 32.4-32.0 ts/ha, respectively, in the variant with pruning on 11-12 branches. The lowest yield of seeds in this cotton variety was sown on April 10, with a yield of 28.9 ts/ha, respectively.

According to the data obtained, Bukhara-8 cotton variety was sown on April 20-25 and 12-13 stalks were sown, while Sultan and S-8290 cotton stalks were sown on April 25-30 and sown on 11-12 stalks taken from the options.

From the above data, it can be concluded that according to the morphological characteristics of cotton varieties, depending on the timing of sowing, in order to achieve the maximum yield of the specified yield, due to the stratification of the threshing operation.

REFERENCES:

1. Methods of conducting field experiments, UzPITI-Tashkent, 2007. – P.145.
2. Dospexov B. Methodology of field. M. 1979. – P. 268–285.
3. Yuzbashyan O.Sh., Xamraev F.X. Advantages of chemical spinning and its effect on cotton yield. 2001. p.172-173.
4. Yasheva E., Gabdurashidov I. The effect of smoking on bedwetting // Journal of Agriculture of Uzbekistan, 1987; №7 – P.13.

5. Ibragimov B.O. Factors influencing on growth and development of cotton. Universum: technical sciences: scientific journal. – № 8 (77). Chast 1.M., Izd. «MTsNO», 2020.- pp. 39-44 (Electronic version pech. Publ. – [http: // 7universum. Com / ru / tech / archive / category / 877](http://7universum.Com/ru/tech/archive/category/877)).

6. Ibragimov B.O. Accumulation of dry mass in dependence on the terms of sowing and varietal characteristics of cotton. Melioration as a driver of modernization of the agro-industrial complex in the context of climate change: Materials of the international scientific and practical conference. July 13-20, 2020 / Novocherk. inj.-melior. in-t Donskoy GAU. - Novocherkassk: Lik, 2020. – P. 31–33. ISBN 978-5-907158-89-4.

7. Ibragimov B.O., Domuladjanov I.X. Formation leaf surface of cotton depending on the sowing time and its varietal characteristics. Melioration as a driver of modernization of the agro-industrial complex in the context of climate change: Materials of the international scientific and practical conference. July 13-20, 2020 / Novocherk. inj.-melior. in-t Donskoy GAU. - Novocherkassk: Lik, 2020. – P. 34–36. ISBN 978-5-907158-89-4.

8. Ibragimov B.O., Ibragimov O.O. Influence of sowing dates and varietal characteristics on the growth and development of cotton. Melioration as a driver of modernization of the agro-industrial complex in the context of climate change: Materials of the international scientific and practical conference. July 13-20, 2020 / Novocherk. inj.-melior. in-t Donskoy GAU. – Novocherkassk: Lik, 2020. – P. 37–40. ISBN 978-5-907158-89-4.