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Краткий обзор/Brief review

Бобоева Н.Т.,
Негматова С.Т.

Термизский Государственний Университет, Научно исследовательский институт селекции, семеноводства и агротехнологии выращивания хлопка (НИИССАВХ),
E-mail negmatova1973@inbox.ru

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Конфликт интересов отсутствует

Влияние агротехнических мероприятий на количество случаев заражения и урожай хлопка

РЕЗЮМЕ

В статье описаны научные и практические основы методов профилактики и борьбы с заражением хлопчатника в условиях Сурхандарьинской области – южного региона республики. Для снижения числа случаев зараженения хлопчатника гербицидами средневолокнистых сортов хлопчатника в Сурхандарьинской области при частоте всходов 90–100 тыс. кустов на гектар эффективна своевременная и качественная обрезка растения.

Nodira T. Boboeva,
Teshaevna N. Surayyo

Termez State University, Cotton Breeding, seed production and agro technologies research institute

Key words: Entogenic, number of bushes, herbaceous shackles, twigs, yield elements

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There is no conflict of interests

Effects of agrotechnical measures on the number of plant-eating candles and cotton yield

ABSTRACT

This article describes the scientific and practical basis of methods of prevention and control of cotton infestation with herbivorous handcuffs in the conditions of Surkhandarya region, which is the southern region of the Republic. In other words, in order to reduce the contamination of cotton with herbicides in medium-fiber cotton varieties in Surkhandarya region, leaving the seedling thickness of 90–100 thousand bushes per hectare, timely and high-quality pruning will help significantly by reducing the spread and number of handcuffs

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Introduction

It is known that the agricultural sector is one of the main directions in increasing the economic potential of the Republic. In our country, in order to obtain high-quality agricultural products, it is important to pay attention to seed production, the use of resource-saving agro-technical measures, as well as effective protection against pests. Plant pests are a major disaster, negatively affecting a large portion of the crop during plant growth and product storage.

One of such pests is the widespread development of herbivorous caterpillars, which causes great damage to cotton yields and is becoming a topical issue in agriculture today.

It is estimated that more than 30 percent of the world's agricultural crop is destroyed each year by pests, diseases, pathogenic microorganisms and weeds. In developed countries, such mortality is 20–25 percent, while in less developed countries it is 40 percent, even up to 50 percent.

There are 13 types of shackles in Uzbekistan. Two of them, alfalfa and alfalfa, live in cotton fields, causing significant damage to the cotton crop. Damage to cotton by handcuffs leads to a decrease in the intensity of respiration and the activity of oxidative enzymes in the plant, a significant loss of yield and deterioration of quality, shedding of young harvest elements and seed failure.

Discussion

Influence of alfalfa (Adelphocoris lineolatus) and field lynx (Lygus protensis) on cotton yield was observed in fine and medium fiber cotton fields in different soil and climatic conditions of Surkhandarya region [4, 2]. the damage of the field candelabra (Lygus protensis) and the cotton candy (Creontiades pallidus), a new species for the region, was found to be significant. The most common of these species, the dominant one, is the cotton candelabra (Creontiades pallidus). [3].

In the experiments of Kuchkarov A.Kh. et al. [2], it was found that the density of cotton candy increases from late May to early September and then decreases naturally.

In addition to legumes, alfalfa has been found to cause severe damage to cotton and seed sugar beets. I.Vasilev [1] was the first to determine the strong damage of alfalfa to the cotton crop in the conditions of the Fergana Valley.

In the conditions of Surkhandarya region, in the cotton fields of 2016, a type of herbivorous handcuffs that have not been encountered before was found to cause severe damage to cotton. Currently, research is being conducted to study the biological and ecological characteristics of this new species [5].

Adelphocoris lineolatus Goeze is a sucking insect and has not been adequately studied in the agricultural literature. Its biology, distribution, overwintering, reproduction, lifestyle damage to cotton and other plants, measures to combat it are not fully developed. In recent years, cotton handcuffs have had a strong impact on cotton production in Surkhandarya region. The study of the most dangerous enemy of cotton - its lifestyle, wintering, reproduction, harmful effects on agricultural crops, especially cotton, the development of agrotechnical, prophylactic, biological and chemical control measures against it is of paramount practical importance.

Research methods: Observations, calculations and research in experiments and production tests "Methods of field experiments with cotton" (2007), "Methods of state testing of agricultural varieties" (Moscow, Kolos, 1969), "Methods of agrophysical research" (1973) , 4th edition, SoyuzNIXI), "Methods of agrochemical analysis of soil and plants" (1977, 5th edition, Tashkent, SoyuzNIXI).

In the mathematical analysis of productivity used the manual of B.A. Dospekhov "Methods of dispersion analysis", Moscow, 1966.

In the experiment, medium-ripe cotton varieties "Sultan" and "Bukhara 102" were planted and cultivated.

The results obtained. Scientific researches on agrotechnical measures, methods of pruning and seedling thickness on the number of herbaceous caterpillars in cotton, the effect of cotton elements on plant caterpillar damage and cotton yield were studied.

According to the results of the survey, in the field of the farm "Shoxbarakat" medium-fiber cotton variety "Bukhara-102" was planted in different seedling thicknesses, on June 28, when the number of cotton seedlings was left at 90–100 thousand / ha, 1 plant per 100 plants; when the number of bushes was left at 110–120 thousand / ha, there were 1 and when the number of bushes was left at 130–140 thousand / ha, there were 2 herbaceous shackles. When the number of herbivorous handcuffs was determined on 28 August, 12 according to the options; 17; As the number of seedlings increased to 29, the number of shackles also increased. When the number of seedlings was increased to 130–140 thousand bushes per hectare, it was found that the number of seedlings per hectare increased by 17 to 90–100 thousand bushes per hectare.

In the experiment, it was found that the weight of cotton in one stalk and the number of seedlings in the cotton crop depends on the number of seedlings when planted in different seedling thicknesses of the variety "Bukhara-102".

Table 1. **The effect of seedling number on cotton weight and yield per bush**

Cotton variety	Experiment options	Seedling thickness in the experimental field, thousand / ha	The weight of a cotton ball, g	Cotton yield, t/ha
Bukhara-102	90–100 thousand / ha	95,0	6,2	33,0
	110–120 thousand / ha	113,3	5,7	31,7
	130–140 thousand / ha	129,0	5,4	29,3
			HCP_{05} = +1,22	HCP_{05} = +1,71%

Table 2. **The effects of the methods of decapitation on the number of Adelphocoris lineolatus**

Cotton variety	Decapitation methods	The degree of contamination of cotton elements with handcuffs		
		Yield elements, pcs	Damaged, pcs	Damage, as a percentage
Sultan	Entojean + decapitation	20,8	1,3	6,8
	decapitation is held	20,0	1,5	7,8
	decapitation is not held	17,5	3,7	21,8

Cotton variety "Bukhara-102" with a number of bushes of 95.0 thousand / ha, the weight of cotton in 1 box is 6.2 grams and the yield of cotton is 33.0 ts / ha, when the number of bushes is 111.3 thousand / ha, the weight of cotton in 1 box 5.7 grams, the yield of cotton was 31.7 ts / ha and 129.0 thousand / ha, the weight of cotton in 1 piece was 5.4 grams, the yield of cotton was 29.3 ts / ha (Table 1).

The effect of agro-technical measures on the contamination of cotton elements with plant-eating handcuffs was studied in the medium-fiber variety "Sultan". Damage to cotton-growing elements by herbivorous handcuffs was observed in experiments conducted on 9 August and 28 August and 18 September (Table 2).

Observations determined the number of elements produced in plants, including those affected by grains and the percentage of damage.

According to the results of the experiment, when entogen was applied in combination with cotton bollworm, a single plant contained 20.8 yield elements, of which 1.3 were damaged. That is, 6.8% of the crop elements are damaged by shackles. The plant contained 20 fruiting elements when pruned alone, of which 7.85% were infested with handcuffs. In the absence of cotton picking at all, there were 17.5 crop elements, of which 3.7 were damaged, or 21.8%.

Conclusion

In summary, in the conditions of Surkhandarya region, in order to reduce the contamination of cotton with herbicides in medium-fiber cotton varieties, it is recommended to leave the seedling thickness at 90–100 thousand bushes per hectare. At this optimal seedling thickness, 33.0 quintals per hectare was harvested when cotton was grown, an additional 3.7 quintals per hectare compared to the option of 130–140 thousand seedlings per hectare.

Also, among the agro-technical measures against handcuffs - timely and quality weeding in cotton, the use of weeding and entegean ensured a significant reduction in the spread and number of weeds.

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ABOUT THE AUTHORS:

Nodira T. Boboeva, independent researcher
Surayyo T. Negmatova, Doctor of Agricultural Sciences, Senior Researcher, negmatova1973@inbox.ru,
https://orcid.org/0000-0002-6104-7924

НОВОСТИ • НОВОСТИ • НОВОСТИ • НОВОСТИ • НОВОСТИ •

Грибы получили статус сельскохозяйственной продукции

По инициативе Минсельхоза России Правительство РФ отнесло грибы к сельскохозяйственной продукции. Теперь это отражено в официальном документе – соответствующем постановлении Правительство Российской Федерации.

Целью данного постановления, как отмечают в пресс-службе Минсельхоза, является ускоренное наращивание производства культивируемых грибов отечественными предприятиями, а также устранение оснований, препятствующих отнесению грибов и трюфелей, включая мицелий грибов, к сельскохозяйственной продукции при налогообложении. Ожидается, что отечественное грибоводство в результате станет более конкурентоспособным направлением сельскохозяйственного производства, в том числе благодаря снижению производственной себестоимости и повышению рентабельности производства.

В последние годы объем производства культивируемых грибов в России ежегодно растет и по итогам 2019 года достиг рекордных 48 тыс. тонн. Это в 1,9 раза выше уровня 2018 года. Тогда было выращено 25,5 тыс. тонн. За последние 5 лет увеличение составило более чем в 5,5 раз – с 8,7 тыс. тонн в 2015 году. В настоящее время суммарная мощность действующих в стране грибоводческих предприятий превышает 68 тыс. тонн. Регионами-лидерами по производству грибов являются Курская, Московская, Тульская области и Краснодарский край.

Бурному росту отечественного грибоводства способствовали меры господдержки в виде льготных инвестиционных кредитов на строительство грибоводческих комплексов.