The Benefits of Defoliation

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ABSTRACT

The new Ento-Dephol showed a higt result, when guza couses open 50-60% while using 0,15 litres of defoliation for each hectar in order to defoliante cotton artificially.6,0 litres use of defoliation gave better result regarding to the other alternatives.

Keywords: Types Of Defoliation and Defoliants, Cotton Leaves Dry and Semi-Dry Leaves.

Introduction

It is known that during the defoliation of cotton, along with the fall of the leaves of cotton, the ripening and opening of the bolls is accelerated, the yield of fibers increases, it gently acts against pests and diseases in cotton, the yield of the first harvest of cotton and the overall yield increase, and also improves the quality, which makes it possible to perform autumn-winter events [1-5]. Of course, for this it is necessary to know the rate of defoliants that are used in cotton. The reason is that if you increase the rate of defoliants used in cotton, then it negatively affects the quality of seeds and fibers, on the contrary, if they are used at a low rate, it does not give the expected effect, that is, scientists have proven that the costs incurred will go to waste [6-9]. From this point of view, the sharp difference from each other is the feature of defoliants created in recent years, taking into account climate change and the mechanization of harvesting; the development of new mildly acting defoliants used normally is an urgent task [10-17].

Research methodology

Based on the above urgent tasks, we conducted research on this topic for 2018-2020 in field soil conditions at the Research Institute of Cotton Breeding, Seed Growing and Agrotechnology, located in the Kuva district of the Fergana region with a high level of soil moisture, less saline, at a depth of 1 .6-1.8 meters [18-24]. In the experiment, for each variety, 8 variants were obtained, placed in 3 repetitions. To the selected variants C8290 of cotton varieties C8290 and C6775, with a period of opening of the leaves of cotton bolls of 30-40% and 50-60% during the period of shedding, the defoliant Ento-Defol with a norm of 0.10-0.15-0.20 l / ha, and the local defoliant FanDef-alo with a norm of 5.0-6.0-7.0 l/ha control also compared with the liquid defoliant magnesium chlorate (8.0 l/ha) determined the application of the norm and term. Scientific

research was carried out on the basis of the methodological manuals of UzPITI "Methodology of field experiments with cotton" (1981), "Methodology for conducting field experiments" (2007) and adopted by the State Commission of Chemistry of the Republic of Uzbekistan "Guidelines for testing defoliants in cotton" (1993, 1994, 2004).

Results and Discussion

During the observation and analysis of C-8290 bolls of the cotton variety in the period of 50-60%, that is, 14 days after defoliation, in the control variant, the number of natural fallen leaves was 10.0%, and the number of green leaves was 86.5%. Liquid defoliant chlorate-magnesium with a rate of 8.0 l/ha as a reference for the applied options, 14 days after defoliation, leaf fall was determined in about 85.9% of cotton [1]. The highest results of the Ento-Defol defoliant were observed in the variant where it was applied at a rate of 0.15 l/ha 14 days after defoliation, cotton leaf fall was 88.4%. It should be noted that C-8290 cotton variety with a 50-60% bolls opening period in variants where the new defoliant Ento-Defol was used with a rate of 0.15 l/ha, the defoliation efficiency is higher than that of the control variant and the defoliant Liquid CMD (8.0 l / ha) had more leaf fall.

The highest results of studies in the defoliant FanDef-alo variant where it was applied at a rate of 6.0 l/ha, 14 days after defoliation, cotton leaves fell to 87.7%, 0.2% of semi-dry leaves were determined to be preserved in cotton bushes.

In the second variant C-6775 varieties of cotton in the period of bolls opening 50-60% during defoliation, the control variant noted that, 14 days after defoliation, natural leaf fall was 8.8%, and green leaves 87.8%. In the variant where the defoliant Liquid magnesium chlorate 8.0 l/ha was used as ethanol, 14 days after defoliation, cotton leaf fall was determined to 84.5%. The highest results were obtained where the Ento-Defol defoliant was used at a rate of 0.15 l/ha, 14 days after defoliation, cotton leaves fell off about 87.1%, it was noted that 10.3% of semi-dry leaves remained in cotton bushes [21-26]. It should be noted that the efficiency of defoliation of this new defoliant Ento-Defol in variants where it was applied at a rate of 0.15 l/ha was observed to fall off the leaves of cotton at a higher level than the control variant and the defoliant Liquid CMD (8.0 l/ha). In the variant where the FanDEF-alo defoliant was used at a rate of 6.0 l/ha, 14 days after defoliation, cotton leaves fell off in a high percentage, although 1.2% semi-dry leaves remained in cotton bushes under the influence of the defoliant, this rate of the defoliant showed a high result, than the norm used in other options.

Based on the results of scientific research conducted in the Fergana region in the conditions of meadow-saline soils, the following conclusions can be drawn.

Conclusion

The conducted studies showed that when opening the bolls of 50-60% of the cotton variety C-8290, in the variants where the Ento-Defol defoliant was used at a rate of 0.15 l/ha, high leaf fall was observed. Also, in the variants in which the defoliant Fan Def-a'lo was used at a rate of 6.0 l/ha, it was found that leaf fall was high. Defoliant Ento-Defol with a rate of 0.15 l/ha C-6775 in cotton varieties with bolls opening of 50-60%, and defoliant FanDEF-alo with a rate of 6.0 l/ha had a high effect on leaf fall in variants.

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