THE USE OF BIOLOGICAL PRODUCTS AND THEIR EFFECT ON THE GROWTH, DEVELOPMENT AND YIELD OF RESOWING CORN PLANTS

Qunduzxon Turgunboyevna Jurayeva*; Yakhyokulova Matlubakhon Azizalievna; Madaminova Shoiraxon*****

*Assistant the Department,
«Agrochemistry and Soil Science» of Andijan,
Institute of Agriculture and Agroteshnologies,
UZBEKISTAN

**Senior Teacher of the Department,
«Agrochemistry and Soil Science» of Andijan,
Institute of Agriculture and Agroteshnologies,
UZBEKISTAN
Email id: matluba5@gmail.com

***Student,
Andijan Institute of Agriculture and Agroteshnologies,
UZBEKISTAN

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ABSTRACT

As a result of our research, the high efficiency of the joint use of preparations of Excusal 50 g / l, Eco gum complex and Eco gum FC in the cultivation of corn for grain was revealed. Flour, canned cereals (sweet corn), ethyl alcohol, dextrin, beer, glucose, sugar, syrup, cereals, wine, honey, oil, vitamin E, ascorbic and glutamic acids, corn sticks, milk and many other products are made from corn grains. The same amount of dry stems and leaves contains 37.35 nutrients. Due to the fact that corn is an inter-row crop, it is a good predecessor for many agricultural crops, including cereals, cotton and vegetable crops

KEYWORDS: *Bio Preparation; Corn; Rate Of Using Of The Drug; The Control; Option; Reiteration; Excusal 50 G / L;Eco Gum Complex; Eco Gum FC; Gumi.*

INTRODUCTION

Corn is one of the most widely cultivated cereals in the world. It is a technical, fodder and food plant. Around the world, 20% of the grown crop is used for food needs, and the rest, or two-thirds, is used as feed.

Corn grains contain 65-70% carbohydrates, 9-12% proteins, 4-8% fats, as well as mineral salts and vitamins. Flour, canned cereals (sweet corn), ethyl alcohol, dextrin, beer, glucose, sugar, syrup, cereals, wine, honey, oil, vitamin E, ascorbic and glutamic acids, corn sticks, milk and many other products are made from corn grains. Corn stigmas are used in medicine for diseases

of the gallbladder, liver. Paper, linoleum, viscose, activated carbon, artificial foam, plastic, analgesics and other products are obtained from stems, cobs and leaves.

Corn kernels, green mass, silage and cobs are excellent livestock feed. One kg of grain contains 1.34 units of nutrients and 78 g of digestible protein. Corn is a valuable component in the preparation of animal feed.

100 kg of silage collected at the stage of milky-wax maturation contains 21 nutritional units and 1800 gr. digestible protein. The same amount of dry stems and leaves contains 37.35 nutrients. Due to the fact that corn is an inter-row crop, it is a good predecessor for many agricultural crops, including cereals, cotton and vegetable crops. **[1]**

Given this, it was necessary to study the effect of bio stimulants on the growth, development, formation and yield of re-sowing corn in the conditions of meadow soils in the Andijan region.

TABLE 1 MAKKAZHUHORINING UNIB CHIQISHI VA PHENOLOGICAL KUZATUVLAR

Options	**Germination**		**05/03/2021 (phonological observation)**		**Average plant height 06/03/2021**
Ecosil 50 g/l	April 30	May 4	21,0	5,6	147,0
Ecogum complex	April 30	May 4	18,4	5,3	152,5
Ecogum FC	April 30	May 4	20,8	5,4	157,3
Ecosil 50 g/l Ecogum complex Ecogum FC	April 30	May 4	20,2	5,8	161,5
Ecogumin	April 30	May 4	20,3	5,5	155,6
Control	April 30	May 4	20,8	5,1	149,2

The results of studying the actual density of plants, the formation of the structure of the crop of re-sowing corn in our experience are presented in Table 1.

The density of growths was almost the same in all variants studied in the experiment. Thus, it can be concluded that the preparations used before the expiration date did not affect the change in plant density. **[2]**

In the course of studying the effect of bio stimulants on the formation of elements of the corn crop, it was found that they have a specific effect on the stages of plant development. The best results in terms of the number and length of ears per plant were observed in options 4 and 2, in particular in option 4 with Excusa*l* 50 g / l, *Eco gum*complex, *Eco gum* FK when mixed with the number of ears per plant was 1.1, 1 length cob was 31.2 cm. This figure is 0.3 and 11.1 cm higher than the control variant, respectively. With regard to ear length, the results observed in option 2, where the *Eco gum* complex was used, also showed that this preparation had a positive effect on the formation of corn cob length, which was 4 cm longer than the control. However, in this variant, the results in terms of the number of cobs in 1 plant were the same as in variant 4, but it was noted that the length of the cob was 7.1 cm less than in variant 4. **[3]**

The indicators for the weight of grains in one cob, the yield of grains from one cob and the weight of 1000 grains repeated the above patterns of growth by variants. **[4]**

TABLE 2 INFLUENCE OF BIO STIMULANTS ON THE GROWTH AND STRUCTURE OF THE CORN CROP

Options	Options plant density (PCS)	Wed plant height (cm)	The number of cobs in 1 piece. (PCS)	Average ear length (cm)	Weight 1 ear in a place with kami grains (gr)	Weight of grains in 1 cob (gr)	Grain yield %	Weight 1000 grains (gr)
1	54997	195,4	1,2	22,9	185,2	83,7	45,2	188,1
2	54997	184,2	1,3	24,1	188,3	90,9	48,3	191,6
3	54997	179,8	1,2	22,6	186,3	88,3	47,4	195,4
4	54997	208,6	1,4	31,2	191,0	97,4	51,0	202,1
5	54997	188,6	1,2	23,2	184,4	84,6	45,9	199,5
6	54997	160,1	1,2	20,1	184,4	73,7	40,2	176,9

Preliminary results for corn yields are shown in Figure 1 and Table 3.

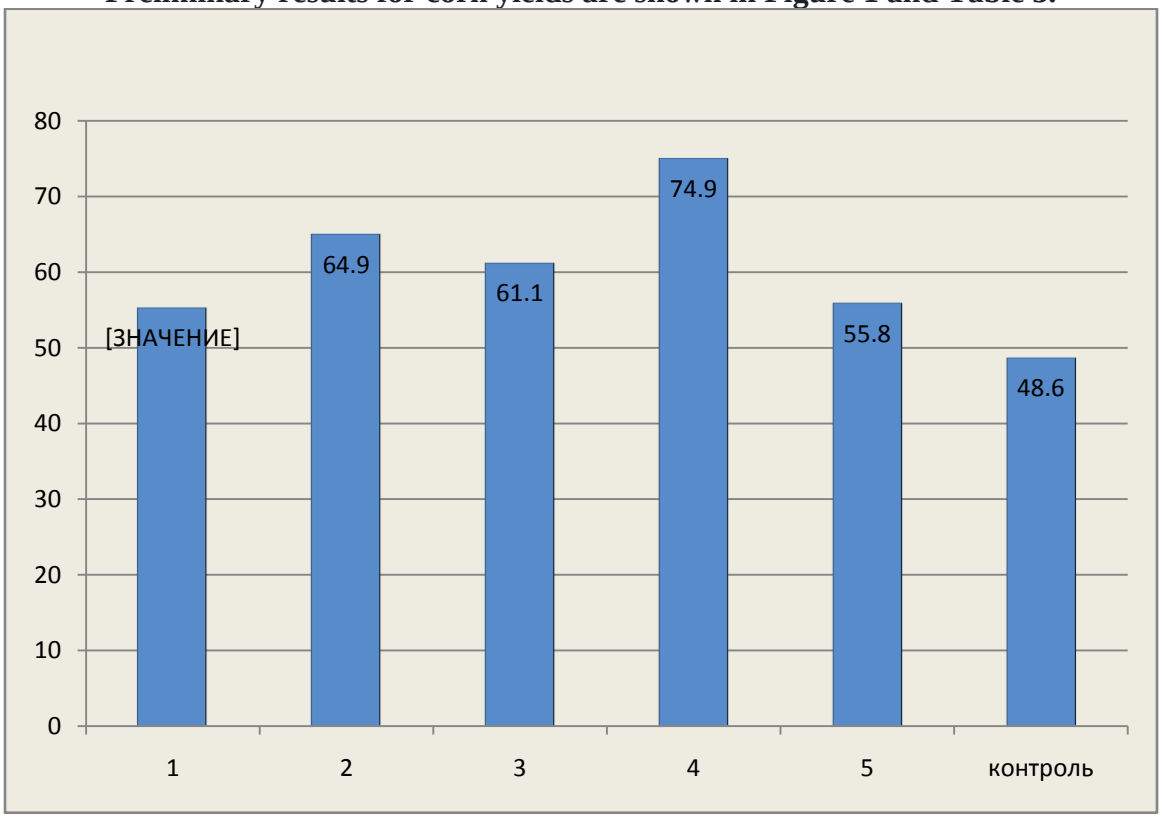

Figure 1 Effect of bio stimulants on sunflower yield. c/ha

TABLE 3 PRIMARY DATA ON THE EFFECT OF BIOLOGICAL PRODUCTS ON THE YIELD OF CORN

№	Options	Productivity by repetitions, center/ha				Wed yield c/ha	Yield increase s/ha
		I-repetition	II-repetition	III-repetition	IV-repetition		
1	*Excusal 50 g/l*	55,0	55,1	55,3	55,4	55,2	6,6
2	*Eco gum complex*	64,7	64,8	65,0	65,1	64,9	16,3
3	*Eco gum FC*	61,3	60,9	61,0	61,2	61,1	12,3
4	*Excusal 50 g/l Eco gum complex Eco gum FC*	74,7	75,1	74,8	75,0	74,9	26,3
5	*Eco gumin*	57,8	57,9	58,1	57,4	55,8	7,2
6	Control	43,6	43,7	44	43,5	48,6	-

The highest yield - 74.9 c/ha was observed in option 4, where Excusal 50 g/l, Eco gum complex, Eco gum FK were used in combination.

REFERENCES

1. Chirkov ZhN. "Grain crops", Uzbekistan, Tashkent; 1975

2. Oripov RO, Khalilov NKh. “Crop production” Tashkent; 2007

3. Musaev BS. "Agrochemistry" Tashkent, publishing house "Sharq"; 2001

4. Sattarov DS. et al. "Agrochemistry". Tashkent; 2011 (in Uzbek).