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TO STUDY THE EFFICACY OF ETOGROWTH-T™235 ON EGGPLANTS

1. Objective:

- 1.1 To study the effect of ETOGROWTH-T™235 on the growth promotion and quality of eggplants / brinjal.
- 1.2 To determine the ideal application dosage of ETOGROWTH-T™235 on eggplants / brinjal under the local climatic conditions.

2. Materials & Methods

- 2.1 Materials : ETOGROWTH-T™235.
- 2.2 Test Duration : March '98 ~ May '98.
- 2.3 Experimental Plot : Guang Dong Meizhou Agricultural University vegetable farm.
- 2.4 Methods

Seedlings preparation using the plastic tray begun on 29/11/97. Transplanting was done on 12/3/98, planting 2 rows on each test bed with 22 seedlings on each row. Each treatment was sprayed at fixed interval, and the growth rate, pest control, no of flowering and yield recorded.

Spraying started on 26/3/98.

Treatment A	ETOGROWTH-T™235 (1:100)
Treatment B	ETOGROWTH-T™235 (1:200)
Treatment C	ETOGROWTH-T™235 (1:400)
Treatment D	Control (Water)

Each treatment with 2 replicates. First 3 sprays at 7 days interval and 4th spray onwards at 10 days interval, a total of 6 sprays.

The 1st harvest is on 23/4/98 and subsequently once every 4~5 days till 21/5/98., a total of 7 harvests was recorded. The total yield of each treatment was recorded and 20 pieces were randomly selected from each treatment to analyze the length, color and total marketable yield. From the results, the most ideal application dosage of ETOGROWTH-T™ was determined.

3. Test Results and Analysis

Table 1 : Height of eggplants / brinjal plants.

Treatment Replicate	A		B		C		D
	AI	AII	BI	BII	CI	CII	
Date	Height of eggplants (cm)						
26/3	16.93	15.84	16.90	15.33	16.65	15.64	16.52
	16.39		16.12		16.15		16.52
2/4	18.45	17.16	19.20	17.61	18.85	17.40	
	17.81		18.41		18.13		18.02
9/4	35.15	34.26	41.19	35.28	40.57	35.81	
	34.71		38.74		38.19		35.23

Table 2 : Number of flowers during the flowering stage.

Treatment Replicate	A		B		C		D
	AI	AII	BI	BII	CI	CII	
Date	Average Number of Flowers						
2/4	2.04	1.36	2.95	2.00	1.81	1.64	2.18
9/4	4.75	3.79	5.67	4.44	4.24	4.43	4.41
8/5	3.57	6.26	3.81	4.78	3.81	4.43	3.68
No. of Flowers	3.45	3.80	4.14	3.74	3.29	3.50	3.42
Total No of Flowers	3.63		3.94		3.40		3.42
Increased %	5.96		15.20		0.73		Control
Rank	2		1		4		3

Table 3 : Damaged leaves

Treatment	A		B		C		D
Replicate	AI	AII	BI	BII	CI	CII	
No of Damaged Leaves	4.38	6.63	4.33	8.83	6.62	13.41	33.32
Total Number of Damaged Leaves	5.51		6.58		10.02		33.32
Decreased in P&D Infestation %	83.48		80.25		69.94		
Rank	4		3		2		1

Table 4 : Length of eggplants / brinjal (Randomly selected 20 pieces)

Treatment	A		B		C		D
Replicate	AI	AII	BI	BII	CI	CII	
Date	Average length of brinjal (cm)						
27/4	23.53	21.98	24.06	23.02	23.18	22.69	22.70
2/5	24.25	22.41	24.23	23.46	24.72	22.73	23.82
Length (cm)	23.89	22.20	24.15	23.24	23.95	22.71	23.26
Average Length (cm)	23.05		23.70		23.33		23.26
Rank	4		1		2		3

Observation : Treatment B, ETOGROWTH-T™235 (1:200) produced bigger, straighter and best coloration eggplants as compared to the other treatments.

Table 5 : Average marketable yield.

Treatment Replicate	A		B		C		D
	AI	AII	BI	BII	CI	CII	
Date	Yield (kg)						
23/4	10.7	3.7	9.8	4.3	6.8	4.3	7.0
27/4	9.8	5.5	12.1	5.7	6.2	8.6	8.7
2/5	11.0	6.0	11.7	4.7	15.5	5.5	7.8
6/5	17.5	13.0	16.0	14.4	14.0	12.5	16.7
10/5	10.0	17.5	8.5	15.0	19.5	8.0	17.0
15/5	6.2	11.6	7.5	13.1	9.5	16.9	10.1
21/5	20.8	9.0	13.1	8.5	0.0	15.0	0.0
Yield	76.3	66.3	78.7	65.65	71.5	70.8	67.3
Total Yield	142.6		144.35		142.3		
Increased %	5.94		7.24		5.72		Control
Rank	2		1		3		4

4. Conclusion

By comparing the results gathered from the growth rate, flowering, length of brinjal, yield and damaged count of leaves of ETOGROWTH-T™235 and Control,, the following can be concluded :

Treatment A : Effect on P&D control, yield and length of brinjal is more significant.

Treatment B : Effect on P&D control, yield, length of brinjal, flowering promotion, growth enhancement are the most significant amongst all the other treatments.

Treatment C : Growth promotion and length of brinjal are significant.

Treatment B is the most significant. Thus the suggested dilution rate of ETOGROWTH-T™235 on eggplants / brinjal is recommended to be 1:200.