



**MAHATMA PHULE KRISHI VIDYAPEETH
RAHURI 413 722 (MAHARASHTRA)**



A REPORT ON

Testing of MOVI'K on Tomato

(2015-16)

of

Zytex Biotech Pvt. Ltd., Mumbai

Conducted and Reported by

**Officer Incharge
Tomato Improvement Scheme,
Department of Horticulture,
MPKV, Rahuri.**

**TOMATO IMPROVEMENT SCHEME,
DEPARTMENT OF HORTICULTURE,
MAHATMA PHULE KRISHI VIDYAPEETH,
RAHURI, DIST.AHMEDNAGAR.**

Title of the experiment : Effect of MOVI'K on growth and yield in tomato.

Objectives : 1. To find out the effect of MOVI'K on the plant growth.
2. To study the effect of MOVI'K on yield.

Name of the firm : Zytex Biotech Pvt. Ltd., Mumbai

Name of the product : MOVI'K

Name of Research workers : Dr. D.B. Kshirsagar and Dr. S.R. Shinde

Experimental details :

Location : Tomato Improvement Scheme,
Department of Horticulture,
MPKV, Rahuri.

Variety/hybrid : Abhinav

Season and year : Rabi 2015-16

Design : Randomized Block Design (RBD)


Replications : Two

No. of treatments : Eleven

Plot size : 3.6 x 3.3 m²

Spacing : 90 x 30 cm

Date of transplanting : 8/1/2016


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Treatment details:

Treatments	Product	Drenching Stage	Quantity	Time of Application
T ₁	MOVI'K + RDF	15 DAT	1.25g/ lit	23.1.2016
T ₂	MOVI'K + RDF	40 DAT(At flowering & fruit setting)	1.25g/ lit	17.2.2016
T ₃	MOVI'K + RDF	70 DAT (At beginning of ripening)	1.25g/ lit	21.3.2016
T ₄	MOVI'K + RDF	15 DAT	2.5 g/ lit	23.1.2016
T ₅	MOVI'K + RDF	40 DAT(At flowering & fruit setting)	2.5 g/ lit	17.2.2016
T ₆	MOVI'K + RDF	70 DAT(At beginning of ripening)	2.5 g/ lit	21.3.2016
T ₇	T ₁ +T ₂ +T ₃ + RDF	--	1.25g/ lit	--
T ₈	T ₁ +T ₂ +T ₃ + (50% K 100%N & P RDF)	--	1.25g/ lit	--
T ₉	T ₄ +T ₅ +T ₆	--	2.5 g/ lit	--
T ₁₀	T ₄ +T ₅ +T ₆ + (50% K 100%N & P RDF)	--	2.5 g/ lit	--
T ₁₁	Control	--		--

Methodology

Recommended dose of fertilizer as 300:150:150 NPK Kg/ha + FYM -20 t/ha was applied to all the treatments.

The drenching of the product including MOVI'K were done after transplanting at specific intervals as given above.

Observations recorded

- 1 Plant height (cm)
- 2 Number of branches/plant
- 3 Average fruit weight (g)
- 4 Fruit yield /plant (kg)
5. Fruit yield /plot (kg)
- 5 Fruit yield /ha (t/ha)

Nutrient status of soil before initiation of the experiment for macro nutrients

Particulars	N (kg/ha)	P (kg/ha)	K (kg/ha)
Status	190	23	414

Nutrient status of soil after harvest of the crop for macro nutrients

Treatments	N (kg/ha)	P (kg/ha)	K (kg/ha)
T ₁	197	50	868
T ₂	203	51	728
T ₃	197	41	644
T ₄	225	38	728
T ₅	206	53	896
T ₆	200	43	616
T ₇	213	39	616
T ₈	219	25	915
T ₉	228	30	476
T ₁₀	200	47	560
T ₁₁	241	42	532

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Table 1: Effect of MOVTK on growth and yield in tomato during Rabi 2015-16

Treatments	Height of plant (cm)	Number of branches/plant	Average weight of fruit (g)	Yield / plant (kg)	Yield / plot (kg)	Yield/ha (t)
T ₁	92.40	4.50	75.20	1.56	62.73	52.80
T ₂	96.10	4.60	77.20	1.59	63.58	53.52
T ₃	91.40	4.50	77.40	1.59	63.83	53.73
T ₄	97.60	4.70	78.20	1.63	65.23	54.80
T ₅	93.20	4.70	79.20	1.67	66.80	56.23
T ₆	98.20	4.70	88.40	1.77	71.09	59.84
T ₇	98.30	4.70	81.20	1.70	68.10	57.32
T ₈	97.00	4.70	86.20	1.73	69.36	58.39
T ₉	98.90	4.80	90.80	1.79	71.72	60.36
T ₁₀	98.90	4.60	88.20	1.75	70.11	59.01
T ₁₁	92.70	4.40	78.80	1.59	63.64	53.57
SE±	4.91	0.34	7.04	0.11	4.49	3.78
CD at 5 %	10.94	0.76	15.69	0.25	10.00	8.43

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Results :

The experiment on testing of MOVI'K drenching on growth and yield of tomato hybrid Abhinav was carried out at Tomato Improvement Scheme, Department of Horticulture, MPKV., Rahuri during Rabi, 2015-16. The data regarding growth and yield contributing character is presented in Table 1. The application of product at different interval of days showed significant difference in height of plant, number of branches, average weight of fruit, number of fruits per plant and yield. The results are discussed as under.

It was observed that the yield per ha. was differed significantly due to various spray treatments. The maximum yield per hectare was recorded in treatment T₉ (60.36 tons/ha) and lowest yield was revealed in treatment T₁ (52.80 tons/ha). The average fruit weight was recorded highest in the treatment T₉ (90.80g). The average yield per plant was maximum in the treatment T₉ (1.79 kg). The plant height (98.90 cm) and the number of branches per plant (4.80) were highest in the treatment T₉.

The overall results indicated that, the treatment T₉ is found superior for higher yield over control.



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