

PROGRESS REPORT

ON

**Efficacy Testing Of *Bounty* on Growth and Yield of
Okra & Maize Hybrids
(Ritika Research Labs)**



Submitted by

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Name of Project	:	Efficacy Testing of Bounty on Growth and Yield of Okra & Maize Hybrids
Objective	:	<ol style="list-style-type: none"> 1. To evaluate the effect of GMX Soil Pro Max on physiological development of Okra crop. 2. To evaluate yield potential of Okra crop treated with GMX Soil Pro Max under field conditions.
Location	:	Vegetable Research Farm Kalyanpur, Kanpur
Technical Programme	:	
Hybrids	:	
Okra		Akash- 2050 (Hybrid)
Maize		Azad Sankar Makka-2 (hybrid)
Treatments	:	<ol style="list-style-type: none"> 1. Regular Cultural Practices (RCP) 2. RCP + Seed treatment 3. RCP + Drenching 4. RCP + Seed treatment + Drenching 5. RCP + Seed treatment + Foliar Application 1 + Foliar Application 2 6. RCP + Drenching + Foliar Application 1 + Foliar Application 2 7. RCP + Seed treatment + Foliar Application 1 + Foliar Application 2 – 20% Fertilizer 8. RCP + Drenching + Foliar Application 1 + Foliar Application 2 – 20% Fertilizer 9. RCP + Drenching + Foliar Application 1 + Foliar Application 2 – 50% Fertilizer
Replications	:	Three
Agronomical Practices	:	
Plot size	:	Gross Plot Size 5.40 x 4.50 M ² Net Plot Size 4.50 x 3.60 M ²
Row to row distance	:	Maize 90 cm Okra 45 cm
Plant to plant distance	:	Maize 45 cm Okra 30 cm
Fertilizer (Kg/ha)	:	
Okra		60:40:40
Maize		120:60:50
Date of sowing	:	
Okra		03/07/2015
Maize		04/07/2015
Weedicide	:	Atrazine @1.50 Kg/ha (Pre emergence)
Date of harvesting	:	Maize Experiment failed Okra 05/10/2015

Observations recorded:**1. Date of sowing**

S. No.	Treatment	Okra	Maize
1	Regular Cultural Practices (RCP)	03.07.2015	04.07.2015
2	RCP + Seed treatment	03.07.2015	04.07.2015
3	RCP + Drenching	03.07.2015	04.07.2015
4	RCP + Seed treatment + Drenching	03.07.2015	04.07.2015
5	RCP + Seed treatment + Foliar Application 1 + Foliar Application 2	03.07.2015	04.07.2015
6	RCP + Drenching + Foliar Application 1 + Foliar Application 2	03.07.2015	04.07.2015
7	RCP + Seed treatment + Foliar Application 1 + Foliar Application 2 – 20% Fertilizer	03.07.2015	04.07.2015
8	RCP + Drenching + Foliar Application 1 + Foliar Application 2 – 20% Fertilizer	03.07.2015	04.07.2015
9	RCP + Drenching + Foliar Application 1 + Foliar Application 2 – 50% Fertilizer	03.07.2015	04.07.2015

2. Germination (%)

S. No.	Treatment	Okra	Maize
1	Regular Cultural Practices (RCP)	79	81
2	RCP + Seed treatment	81	85
3	RCP + Drenching	80	83
4	RCP + Seed treatment + Drenching	80	84
5	RCP + Seed treatment + Foliar Application 1 + Foliar Application 2	82	84
6	RCP + Drenching + Foliar Application 1 + Foliar Application 2	82	85
7	RCP + Seed treatment + Foliar Application 1 + Foliar Application 2 – 20% Fertilizer	81	84
8	RCP + Drenching + Foliar Application 1 + Foliar Application 2 – 20% Fertilizer	80	85
9	RCP + Drenching + Foliar Application 1 + Foliar Application 2 – 50% Fertilizer	82	84

3. Plant height at flowering and fruit setting stages (cm)

S. No.	Treatment	Okra	Maize
1	Regular Cultural Practices (RCP)	91.3	-
2	RCP + Seed treatment	95.4	-
3	RCP + Drenching	94.4	-
4	RCP + Seed treatment + Drenching	96.2	-
5	RCP + Seed treatment + Foliar Application 1 + Foliar Application 2	97.1	-
6	RCP + Drenching + Foliar Application 1 + Foliar Application 2	97.3	-
7	RCP + Seed treatment + Foliar Application 1 + Foliar Application 2 – 20% Fertilizer	99.2	-
8	RCP + Drenching + Foliar Application 1 + Foliar Application 2 – 20% Fertilizer	97.7	-
9	RCP + Drenching + Foliar Application 1 + Foliar Application 2 – 50% Fertilizer	99.8	-

4. Length of root at flowering stage (cm)

S. No.	Treatment	Okra	Maize
1	Regular Cultural Practices (RCP)	25.8	-
2	RCP + Seed treatment	29.5	-
3	RCP + Drenching	28.8	-
4	RCP + Seed treatment + Drenching	31.4	-
5	RCP + Seed treatment + Foliar Application 1 + Foliar Application 2	35.1	-
6	RCP + Drenching + Foliar Application 1 + Foliar Application 2	33.3	-
7	RCP + Seed treatment + Foliar Application 1 + Foliar Application 2 – 20% Fertilizer	33.1	-
8	RCP + Drenching + Foliar Application 1 + Foliar Application 2 – 20% Fertilizer	32.4	-
9	RCP + Drenching + Foliar Application 1 + Foliar Application 2 – 50% Fertilizer	31.2	-

5. Date of final harvest

S. No.	Treatment	Okra	Maize
1	Regular Cultural Practices (RCP)	05.10.2015	-
2	RCP + Seed treatment	05.10.2015	-
3	RCP + Drenching	05.10.2015	-
4	RCP + Seed treatment + Drenching	05.10.2015	-
5	RCP + Seed treatment + Foliar Application 1 + Foliar Application 2	05.10.2015	-
6	RCP + Drenching + Foliar Application 1 + Foliar Application 2	05.10.2015	-
7	RCP + Seed treatment + Foliar Application 1 + Foliar Application 2 – 20% Fertilizer	05.10.2015	-
8	RCP + Drenching + Foliar Application 1 + Foliar Application 2 – 20% Fertilizer	05.10.2015	-
9	RCP + Drenching + Foliar Application 1 + Foliar Application 2 – 50% Fertilizer	05.10.2015	-

6. No of fruits per plant

S. No.	Treatment	Okra	Maize
1	Regular Cultural Practices (RCP)	15	-
2	RCP + Seed treatment	19	-
3	RCP + Drenching	18	-
4	RCP + Seed treatment + Drenching	21	-
5	RCP + Seed treatment + Foliar Application 1 + Foliar Application 2	23	-
6	RCP + Drenching + Foliar Application 1 + Foliar Application 2	23	-
7	RCP + Seed treatment + Foliar Application 1 + Foliar Application 2 – 20% Fertilizer	19	-
8	RCP + Drenching + Foliar Application 1 + Foliar Application 2 – 20% Fertilizer	19	-
9	RCP + Drenching + Foliar Application 1 + Foliar Application 2 – 50% Fertilizer	19	-

7. Yield in kg/ha

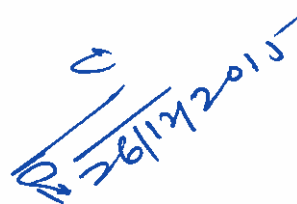
S. No.	Treatment	Okra	Maize
1	Regular Cultural Practices (RCP)	9500	-
2	RCP + Seed treatment	10500	-
3	RCP + Drenching	10250	-
4	RCP + Seed treatment + Drenching	10950	-
5	RCP + Seed treatment + Foliar Application 1 + Foliar Application 2	11680	-
6	RCP + Drenching + Foliar Application 1 + Foliar Application 2	11590	-
7	RCP + Seed treatment + Foliar Application 1 + Foliar Application 2 – 20% Fertilizer	11050	-
8	RCP + Drenching + Foliar Application 1 + Foliar Application 2 – 20% Fertilizer	10850	-
9	RCP + Drenching + Foliar Application 1 + Foliar Application 2 – 50% Fertilizer	10750	-

Recommendations

1. Maize crop was sown on 4th July, 2015 but crop was badly damaged by severe drought. Experiment on maize will be carried out in summer 2016.
2. Okra crop was sown on 3rd July, 2015. Data collected depicted in table no. 1-7 lower growth and yield attributes may be due to severe drought and high temperature. Other parameters were not recorded due to poor health of crop. Experiment will be repeated in summer 2016.


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