

In House STUDY

"SEED TREATMENT THROUGH EM TECHNOLOGY in PADDY & OKRA"

**Experiment 1: In house Seed Germination Test in Paddy through Glass Plate Method.
(JULY'2009)**

Sample	Growth after 1 wk			Growth after 2 wks			Growth after 3 weeks		
	S.L. (mm)	R.L. (mm)	% of germ	S.L. (mm)	R.L. (mm)	% of germ	S.L. (mm)	R.L. (mm)	% of germ
D. water	10	5.5	40	12	8.5	40	12.8	9.2	50 (all diseased)
EM.1 (1:100 dilution)	13.5	5	70	17	12.5	80	17.5	13	80 (10% diseased)

Inference: In case of EM treated seeds shoot length, root length were nearly 30% higher than control. Only 10% EM Treated Seeds suffered from Fungal Attack.

Experiment 2: Seed Germination Test in the Field (of Plot Size 10X20 ft) in Bhindi/Okra.

(11th JULY'2010 TO 13th September'2010)

Sample	Growth after 1 month			Growth after 1.5 months			Growth after 2 months		
	S.L. (mm)	R.L. (mm)	% of germ	S.L. (mm)	R.L. (mm)	% of germ	S.L. (mm)	R.L. (mm)	% of germ
EM.1 (1:100 dilution)	10	5.5	40	23	11.5	95	38.5	15.5	95 (10% diseased)
Control	9.5	5	70	17	10.5	75	23	13	75 (60% diseased)

OBSERVATION taken AFTER 2 MONTHS:

Plot No	Shoot Length (cm)	Root Length (cm)	Avg. No of Leaves (Per Plant)	Avg. No of fruits (Per Plant)	Damaged leaves (Per Plant)	Maximum length of fruit (cm)	Plant Health
EM.1 (1:100 dilution)	38.5	15.5	13	6	1	17	Better
Control	23	13	6	3	1	7.5	Not so good

Inference : In case of EM treated okra –

1. Germination percentage is 20% more than the control
2. Ave length of shoot and root is higher.
3. Ave no. of leaf, fruit and flower is higher.
4. No. of diseased leaf is less.
5. Color of the leaf is better.
6. Plants are more healthy and disease resistant.

Thus, it can be safely deduced that, Yield (Projected) in case of EM Treated Plants can go upto 4.3-4.8 Q/Acre in case of EM treated plants. However, in case of Control it wouldn't be more than 3.2-3.4 Q/Acre.