

# **Tomato Trials**

# <u>Objective</u>

Evaluation of Boreal Agromineral on Growth, Yield and Quality of **Tomato**.

Field experiment was conducted to study the effect of Boreal Agromineral on Tomato hybrid Arka Samrat at experiment research farm block # 2 in ICAR-Indian Institute of Horticulture Research, Hesaraghatta – Bengaluru – Karnataka between the period of February 2018 & July 2018.

Test material: Boreal Agromineral.

Test Crop: Tomato hybrid ArkaSamrat.

Trial Type: Field Experiment.

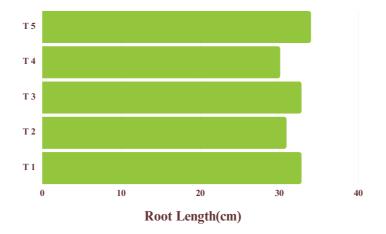
Plot Size: 9m x 4m [36 sq mt.]

# of seedlings per plot: 40 # of treatment: 5

## Treatment Details

T no.	Treatments	Quantity Applied		
1.	Standard Practice - recommended dose of fertilizer (RDF)	180:120:150 kgs of N, P2O5 and K2O per Hectare.		
2.	Boreal Agromineral	1000 kgs per acre through broadcast.		
3.	RDF + Boreal Agromineral	RDF + Boreal Agromineral @ 1000 kgs per acre.		
4.	Boreal Agromineral + N + K	Boreal Agromineral @ 1000 kgs per acre and recommended dose of N & K.		
5.	Boreal Agromineral + N + Potassium Humate	Boreal Agromineral @ 1000 kg per acre along with Potassium Humate @ 100 kgs per acre & recommended dose of N.		

- FYM is common for all treatments.
- Experiment was laid in randomized block design (RBD) with 4 replicators.



Maximum root length was observed in T5.

#### Tomato Yield & Blossom End Rot Damaged fruit data:

Chart representing fruit yield and number of fruits damaged due to BER is as indicated below:

Treatments	No. of Fruits	Avg. Fruit Weight (g)	BER* damaged Fruits
Recommended dose of fertilizers (RDF)	78.8	71.3	5.79 A
MCC/Boreal Agromineral alone @ 1000 kgs per acre	78.54	70.10	3.60 B
RDF + MCC/Boreal Agromineral	85.94	69.12	3.21 B
MCC/Boreal Agromineral + Recommended N + K	89.22	70.26	2.29 C
MCC/Boreal Agromineral + Recommended N + K + Potassium Humate	79.66	69.58	3.31 C
p-value	0.394	0.967	0.046
CV(%)	11.16	6.39	13.65
SE(d)	6.507	3.165	0.267
LSD @ 5%	NS	NS	0.563

\*BER - Blossom End Rot

# **Conclusion**

- Application of Boreal Agromineral @ 1000 kg per acre along with recommended dose of N + K recorded the highest tomato yield.
- Application of Boreal Agromineral has an additional advantage of reducing Blossom End Rot (BER) damages to the tomato fruits. Least number of fruit damage was observed due to BER thereby resulting in increased yield.