

Title: Efficacy of ecoSolv water on Tomato (BARI-17)

Experiment site and Duration

An experiment was conducted in Horticulture farm, Sher-e-Bangla Agricultural University Dhaka, during 21 September, 2019 to January 2020.

Plant sample: 22 Days age seedling of Tomato (BARI-17) were transplanted

Objectives

- To evaluate the efficacy of ecoSolv water on growth and yield of tomato

Methodologies

Two water treatment viz. ecoSolv water and Normal tap water used for watering the tomato plants and there were 24 plants for each treatment.

Results

The maximum plant height (107.7 cm) at harvest time, SPAD value (46.8), fruit number (25), fruit length (6.7 cm), fruit breadth (7.0 cm), fruit weight (180 g), yield per plant (4.5 kg) which was approximately 30% higher than tap water was found in ecosolv water application.

On the other, plant height (88.3 cm) at harvest time, SPAD value (41.2), fruit number (21), fruit length (5.8 cm), fruit breadth (5.6 cm), fruit weight (167 g), yield per plant (3.5 kg) were recorded in normal water application.

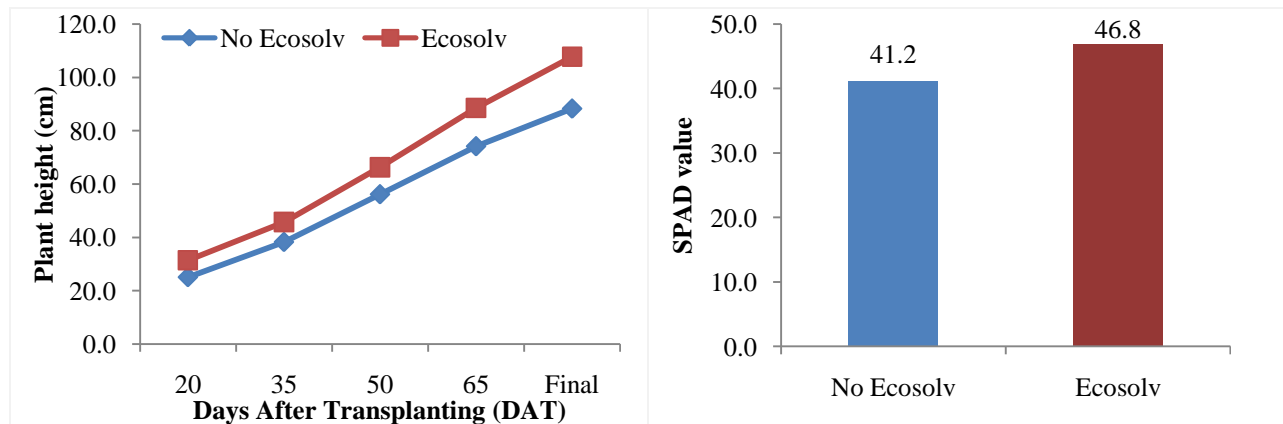


Figure: Effect of eco-solv water on plant height and SPAD value of Tomato

Table: Effect of Eco-solv water on yield attributes of tomato

Treatment	Harvested Fruit number/plant	Fruit length (cm)	Fruit breadth (cm)	Single fruit wt. (g)	Yield/plant (kg)	Increased yield over control (%)
No Eco _{solv}	21	5.8	5.6	167	3.5	–
Eco _{solv}	25	6.7	7.0	180	4.5	28.57



Normal water



ecoSolv water



Normal water



ecoSolv water

Conclusion

ecoSolv water applications increased growth and yield of tomato. So, it will be potential for crop production. It is recommended to make further trial on different high value crops.