

## Outputs of farmers field trials

### BACKGROUND:

In order to improve farmers income via improving cucumber and tomato yield, four field trails, in different locations, were conducted to evaluate cucumber productivity using farmers normal practices in comparison with using ESTIDAMAH recommended practices including proper fertigation formula.

### OBJECTIVES:

1. Studying the effect of lowering growing system as compared with umbrella system on cucumber yield and water use efficiency .
2. Studying the effect of EstIDAMAH fertigation formula on cucumber and tomato yield as compared with farmers practices.



### TREATMENTS:

1. Cucumber lowering and umbrella systems
2. ESTIDAMAH fertigation formula and farmer formula
3. Two tomato plant densities.

### RESULTS:

- The outputs of ESTIDAMAH recommended practices varied with farmers.
- Cucumber yield was improved by 18 to 63% and water use efficiency improved by 2 to 34%
- Tomato yield was improved by 20% when using ESTIDAMAH fertigation formula.
- Cucumber harvesting period increased from 7 to 43 days as compared with farmers practices.



Farm location	Crop	Recommended Estidamah cultural practices	% increase in yield	% increase in irrigation water use Efficiency	Days increase in harvesting period	% saving in Fertilizer cost	% Reduction in pesticide use
Thadiq	Cucumber	lowering + Fertigation formula	18	2	30	Not recorded	Not recorded
Al-Kharj	Cucumber	Fertigation formula	24	34	7	Not recorded	Not recorded
Al-Qasim	Cucumber	lowering	63	Not recorded	43	Not recorded	Not recorded
Al- Taief	Tomato	Plant density + Fertigation formula	20	21	0	20%	Not recorded

### CONCLUSION

- The application of the recommended fertigation formula was the most widespread and applied by the farmers because it is ease for application by the technicians, save fertilizer quantity and easier in measuring the impact on crop yield.