



Umbrella training system



High-wire training system

Background

Estidamah has tested a new cropping system called “High-wire” Training system for cucumber. In this case, the training-wire can be elongated and shifted aside to cope with the continuously growing stem. Continuous stems growing, shall create a large bunch of branches with less messy as compared with Umbrella (Traditional training system). By using High-wire system, cucumber growing cycle will produce for a longer cycle with increasing production in kg per unit area.

Objectives

Commercial evaluation of implementing ESTIDAMAH “High-wire” training system on cucumber at three locations, as compared with traditional training system (Umbrella).

Treatments

Yield and production cycle of two cucumber training systems (High-wire and Umbrella) were tested in three commercial farms; El-Maluhi (Al-Qassim), Al-Rasheed (Al-Kharj) and Al-Muhawes (Thadiq).

Results

- Total cucumber yield of the High-wire growing system was increased by 90% in El-Maluhi, 18% in Al-Rasheed and 50% in Al-Muhawes as compared with umbrella system.
- Cucumber production cycle was increased by 40 days in El-Maluhi, 14 days in Al-Rasheed and 44 days in Al-Muhawes as compared with Umbrella System.

Farm/Location	Planting Date	Yield (kg/m ²)		% Increase in Yield
		Umbrella	High-wire	
El-Maluhi/Al-Qassim	15 th Apr	12.3	23.4	90%
Al-Rasheed/Al-Kharj	28 th Mar	12.8	15.1	18%
Al-Muhawes/Thadiq	1 st Jun	10.0	15.1	50%

Farm/Location	Harvesting Cycle (Days)	
	Umbrella	High-wire
El-Maluhi/Al-Qassim	65	105
Al-Rasheed/Al-Kharj	77	91
Al-Muhawes/Thadiq	41	85

Conclusion

- ❖ High-wire growing system improved fruit yield and increased commercial production cycle for cucumber. However, this improvement varied with farmer practices and greenhouse environmental conditions.