

# Biostimulants increase cucumber yield under water stress

## Background

Biostimulants are a new technology aim to find out new sustainable solution to improve crop production in regions suffering from limited freshwater resources and low soil fertility



## Objectives

Study the effect of bacterial biostimulants on yield of cucumber grown in greenhouses under water stress condition. Also, comparing efficiency of new isolated bacterial biostimulants (local product) to commercial products.

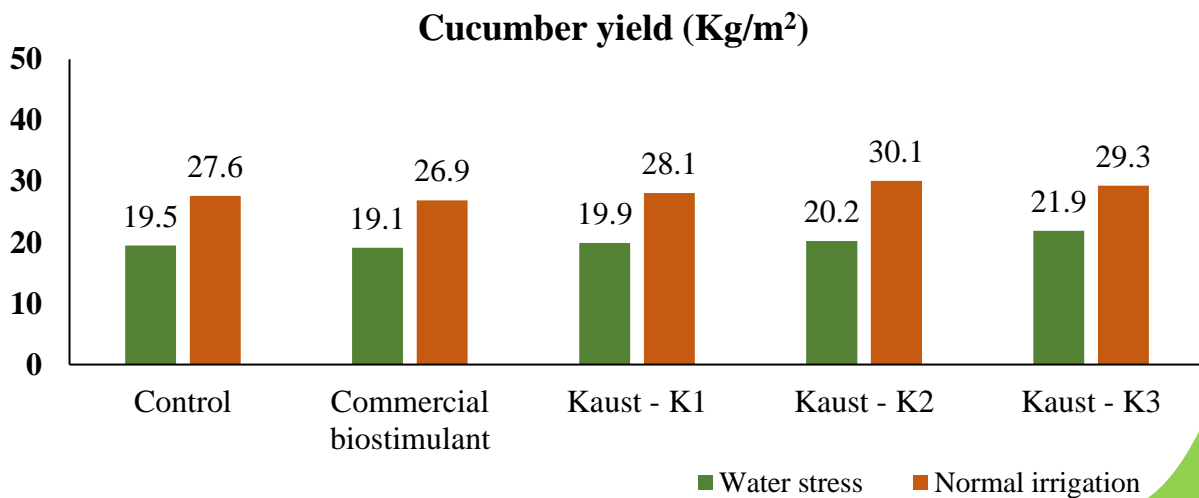


## Treatments

- Water stress ( 30% less of irrigation water)
- Commercial biostimulant
- Three innovated biostimulants (King Abdulla Univ. for Science and Technology “KAUST - K1 , K2 , K3”)

## Results

K2 resulted the highest cucumber yield up to 30.1 kg/m<sup>2</sup> in normal irrigation, while K3 led to better increase in cucumber yield under water stress up to 21.9 kg/m<sup>2</sup> , in comparison to control



## Recommendation

Using of biostimulants increase yield of cucumber grown under normal and water stress