

# Raise efficiency of iceberg lettuce production and quality in hydroponic system



## BACKGROUND:

Iceberg lettuce one of high value crops, price ranges in local markets between 10-12 SAR for local product and about 35 SAR for the imported due to the advantage of imported product of good head, compared to the local , which is almost not available during summer for sensitivity to the high temperatures.

## OBJECTIVES:

- For crop diversity and improving greenhouse income of farmers , was studied the effect of root cooling technology and its relationship to ambient air temperatures on production and quality of heads

## TREATMENTS:

- Cooling the nutrient solution commensurate with cultivation of iceberg lettuce between 16-22°C through different cooling systems includes the chiller and utilizing pad wall water

## RESULTS

- Producing a good and compact heads of lettuce with weight 350 to 400 g when temperature controlled nutrient solution temperature..



## CONCLUSION

- Continuing the study of factors which effecting on quality of iceberg lettuce heads in hydroponics conditions inside greenhouses in Saudi Arabia