



Rockwool

Date Palm Waste

Perlite

Coco-Peat

Background

Soilless culture is considered the best system for growing vegetable crops under protected culture in terms of saving water- and nutrients. However, the commonly used growing media are expensive or even unavailable, while, from the perspective of sustainability, it would be much suitable to search for local alternatives. Date Palm Waste is a locally available substrate in a large quantity since Date production is a big industry in Saudi Arabia. Riyadh region ranked first with 7,030,731 palm trees (24.6%) of the total number of palm trees in the Kingdom. Therefore, this project investigates the effect of Date Palm Waste in comparison with the different commercial substrates (Perlite, Rockwool and Coco-peat) on tomato yield.

Objectives

Addressing the potential of using date palm waste, as available local substrate, in comparison with other commercial soilless substrates on tomato yield.

Treatments

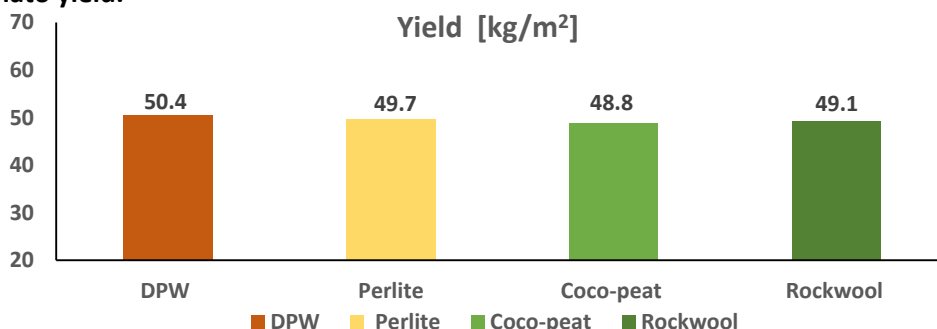
Season : Feb-2020 to Dec-2020.

Substrates:

- Date palm waste 25 mm. (immersed for 24 hrs. in fresh water to reduce EC)
- Perlite
- Rockwool
- Coco-peat

Result

No significant differences between date palm waste and other commercial substrates in terms of tomato yield.



Conclusion

- ❖ Date Palm Waste material is a good locally available substrate for soilless culture in KSA