

UAEUكلية الزراعة والطب البيطري
College of Agriculture and
Veterinary Medicineجامعة الإمارات العربية المتحدة
United Arab Emirates UniversityDepartment: **Integrative Agriculture**

Vegetable Production Under Hydroponic Systems: Organic Liquid Fertilizer Vs. Inorganic Nutrient Solution

Main presenter: **Khuloud Khalfan Saeed Alneyadi**Supervisor: **Dr. Zienab Ahmed**

Co-presenters:

Abstract: Organic fresh products are appreciated and gaining a good reputation regarding human health and environmental concerns. Despite the fact that hydroponics is commonly used in vegetable production using chemical nutrient solutions, growers are looking for sustainable cultivation systems. Therefore, the objective of this study was to investigate the effect of using an organic-based nutrient solution (NS); derived from different organic sources in hydroponic systems, on the vegetative growth and production of lettuce compared to conventional inorganic nutrient solutions. Plant growth, yield, and nutrient content parameters were determined. The results revealed that the overall growth and fresh biomass of lettuce grown under different organic NSs were relatively different from those of the inorganic NS. Organic NS from humic acid source had the best results compared to the other organic NS from plant or fish waste sources. Stomata density was significantly higher in organically grown lettuce compared to the inorganic one. The total chlorophyll and carotene were significantly higher in lettuce grown in organic NS. Leaf nutrient content at harvest was significantly impacted by the type of NS used in the hydroponic system. Based on these findings, in hydroponic systems, organic liquid fertilizer (as an alternative NS source) requires further improvements to achieve optimal growth and yield comparable to that of conventional inorganic NS.

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United Arab Emirates UniversityDepartment: **Veterinary Medicine****Prevalence Of Blood Parasites In Arabian Oryx From The Ddcr, United Arab Emirates**Main presenter: **Mahra Obaid Hasan Almazrouei**Supervisor: **Dr. Moneeb Qablan**Co-presenters: **Meera Khamis Almeqbaali**

*Abstract: this project focuses on the once extinct in the wild Arabian oryx (*Oryx leucoryx*), a medium-sized antelope native to desert and steppe areas, which had to be later reintroduced into the wild in protected areas. An example of this is the Dubai Desert Conservation Reserve (DDCR), a 225 km² reserve located in the UAE's hyper-arid desert where this species of oryx was successfully reintroduced. This reserve was created in 1999 and is an IUCN Green List protected area with the purpose to conserve the indigenous fauna and flora. Now, it is time to ensure that the reintroduction success is matched with an equal achievement in their health status, which is why a number of individuals from this protected area are being currently screened for Vector-Borne Diseases (transmitted by arthropod vectors), specifically trypanosomiasis, piroplasmosis, and anaplasmosis, using molecular biology techniques.*