

Department of Biological and Environmental Sciences

Microbiology/Biotechnology - Research Group- MBRG

Research Interests

- 1-Microbial Biotechnology
- 2-Mycosafe: Control of food-borne mycotoxins in all food chain
- 3-Microbial Biodegradation of polluting molecules and compounds
- 4. Biomineralization processes
- 5- Plant Biotechnology
- 6- Environmental microbiology.
- -Monitoring, prevention and control of mycotoxin Food contamination in Qatar
- -Development of bio-insecticides based on local Qatari Bacillus thuringiensis strains for the biological control of harmful Dipteran disease vectors.
- -Application of hydrocarbon-degrading bacterial consortia for the bioremediation of polluted soils with bio pole technology
- -Innovative environmental-friendly solutions for the re-use of produced waters for irrigation purposes and its effects on plant
- Improvement of Date Palm Production and Quality under Qatar Conditions
- Conservation of endangered Qatari desert plant species through In-vitro and genomic approaches
- -Acacia symbiotic bacteria

Research Projects

- Sustainable Bio-modification of Surface Soils to Resist Erosion due to Wind Loading
- Development of a novel polymer-modified graphene oxide nanocomposites for controlling CaSO4 scaling and biofouling on reverse osmosis











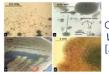




Qatari Bacillus thurinaiensis crystals [Jaoua et al.] [Abdel Fattah et al.]



Qatari osmotolerant tomato



Qatari biomiral forming Virgibacillus bacteria [AlDisi et al.

Members

- Prof. Samir Jaoua
- **Dr Mohammed Alsafran**
- Dr Roda Al-Thani
- Ms Dhabia Al-Thani
- Prof. Nabil Zouari
- Mrs Fatima Al-Yafei
- Dr Talaat Abdelfattah
- Ms Abeer Al-Mohannadi
- Dr Mahmoud Kardousha
- Dr Abd Elrahman El-Khidir

Key Outcomes (last 3 years)

- > 65 publications
- > 4.6 M US\$ funding
- 16 invited talks, > 4 PhD; ++MSc; ++Postdocs
- 8 International collaboration