

***In vitro* propagation of native plant species from Kuwait desert**

Suad Almazrooei

Kuwait University, Kuwait


Clonal propagation by tissue culture of selected plant species, Native to Kuwait desert, was studied. Micropropagation of *Haplophyllum tuberculatum*, *Farsetia aegyptica*, *Heliotropium bacciferum*, *Ochradenus baccatus*, *Rumex vesicarius*, *Salvia spinosa* and *Acacia pachyceras* through axillary bud culture showed different morphogenic potentials depending on species type and ratio of 1-naphthylacetic acid (NAA) to 6-benzylaminopurine (BAP) supplemented in Murashige and Skoog (MS) culture medium. Production of adventitious shoots from callus was the common and frequent response in all tested species. This was mostly achieved at low concentration of NAA within the NAA and BAP combinations applied. Induction of embryogenic callus in *Acacia pachyceras* var. *najdensis* was achieved from embryo axes explants. The largest callus mass

was initiated on MS medium supplemented with 0.1 mg/l 2,4-dichlorophenoxyacetic acid (2,4-D) and 0.5 mg/l BAP. Regeneration of new plantlets from the induced embryogenic callus was achieved on MS medium supplemented with BAP only. In contrast, initiation of embryogenic callus from leaf explants of *A. pachyceras* was achieved on MS medium supplemented with 0.5 mg/l BAP in combination with 0.5 mg/l or 0.1 mg/l 2,4-D. This is the first report of somatic embryogenesis in *A. pachyceras*.

Speaker Biography

Suad Almazrooei is currently working as a Professor in Kuwait University. He is in the department of Biological Sciences. He has completed several projects and has expertise in the field of conservation genetics and microsatellites

e: s.almazrooei@ku.edu.kw

 Notes: