

تعبة الإهتمامات البحثية (نموذج رقم 1)

Assistant Professor	المسمى الوظيفي Job title	Dr. Salman Freeh Alamery	Name / الاسم
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<p>Research interest 1: Abiotic stresses are the major adverse environmental factors that limit plant productivity worldwide. Plants are often simultaneously exposed to multiple abiotic stresses, such as heat, osmotic, drought, salt and others. Therefore, Understanding responses of crop plants under multi environmental stresses is crucial to design novel stress-tolerant cultivars under extreme conditions. With the availability of Functional Genomics and genetics resources of plants, we are interested in the Identification, Cloning, sequencing, and Expression of economical genes underlying biotic and abiotic stresses. Also Utilization of Bioinformatics Software for comparative genomics will be of our interest to study the genetic variations between different phenotypes.</p> <p>Research interest 2: Eye lens of camel possess some structural proteins called Crystallins (α- and β-γ- superfamily) which are responsible for maintenance of lens transparency in such conditions. Alpha-crystallins are composed of αA- and αB- subunits (20 kDa each) and are small heat shock proteins with chaperone activity that control numerous crucial pathways inside the eukaryotic cells. Very few studies are conducted on the characterization of camel α-crystalline and is not being produced by recombinant technology. We are interested to express αB- subunits in E.coli and purify it to homogeneity. The purified protein will be characterized in terms of its activity and structural stability.</p>			الإهتمامات البحثية Research interests (~100 words)
1- Identification of Apomixes phenomena in cereal crops using molecular approaches	2- Study gene expression of different grasses genotypes under heat and drought stresses	3- Recombinant production of camel alpha B crystalline in E coli, its purification and characterization	المواضيع المقترحة للمشاريع البحثية للطلبة الدراسات العليا (الماجستير) Proposed topics for master research projects
none			الابحاث المنشورة مع طلبية الدراسات العليا Publishing with post graduate students
تقنيات ضمن خطة البحث, مواد و تجهيزات, samples عينات Techniques within the research plan			توفر مستلزمات المشروع Availability of project supplies
2			العدد المقترح للإشراف على طلبية الدراسات العليا وحسب اللائحة

	According to the regulations, proposed number of supervised postgraduate students
أقر أنا المدون بياناته أعلاه، ان البيانات المرفقة أعلاه صحيحة given in this form is true, complete and accurate.	إقرار Endorsement