

IDB2023

THE 21ST INTERNATIONAL DAYS OF BIOTECHNOLOGY

December 18th - 21st, 2023
 Hotel Royal El mansour *****
MAHDIA, TUNISIA



TOPICS

INDUSTRIAL
 BIOTECHNOLOGY

ENVIRONMENTAL
 BIOTECHNOLOGY.

PLANT
 BIOTECHNOLOGY

HEALTH
 BIOTECHNOLOGY

BIOACTIVE
 MOLECULES AND
 APPLICATIONS

SCIENTIFIC PROGRAM

Monday 18/12/2023			
09h00-15h	Registration & Lunch		
15h30-16h	Opening Ceremony		
16h-16h40	Plenary Conference 1 Chairmen : Pr. Slim TOUNSI & Pr. Ali GARGOURI		
	Cf1: Pr. Mohamed BOUAZIZ	Untargeted Phytochemical Profiling of Tunisian olive leaves: High added values compound for Food and therapeutic application	
16h40-17h	Coffee Break		
17h-18h15	Poster Sessions Display and Discussions		
	Bioactive Molecules	BMP1-BMP43	
	Plant Biotechnology	PBP1-PBP37	
20h	Dinner		
Tuesday 19/12/2023			
9h00-9h40	Plenary Conference 2		
Chairmen: Pr. Chedly ABDELly & Pr. Radhia GARGOURI			
9hh00-9h40	Cf2: Pr. Vincenzo LONGO	Halophytic plants a new source of bioactive compounds: in vitro and vivo studies to demonstrate their biological activities	
9h45-11h05	3 Parallel Sessions		
	Room 1: Bioactive Molecules 5 Oral communications (BMO1-5) Chairmen: Pr. Mohamed BOUAZIZ & Pr. Samir ABBES		
9h45-10h05	TCI-BMO1	Anis CHIKHOUNE	Bioactive potential of Milk Thistle (<i>Sylibum marianum</i>) seeds and applicability of its edible oil in food processing
10h05-10h20	BMO2	Moufida CHAARI	Novel Active Food Packaging Films Based on Gelatin-Sodium Alginate Containing
10h20-10h35	BMO3	Bouthaina BEN AKACHA	Halophytic Heteropolysaccharide: a new strategy for preserving ground meat during cold storage
10h35-10h50	BMO4	Khaoula EL HADEF	Production of functional raw chicken meat by incorporation of date palm seed extract: an assessment of microbiological, chemical and sensory properties
10h50-11h05	BMO5	Sarra EL AKERMI	<i>Cupressus sempervirens</i> Essential Oil: Exploring the Antibacterial Multitarget Mechanisms, Chemcomputational Toxicity Prediction, and Safety Assessment in Zebrafish Embryos

9h45-11h05	Room 2: Plant Biotechnology 5 oral communications (PBO1-PBO5)		
Chairmen: Pr. Haythem MHADHBI & Dr. Rania BEN SAAD			
9h45-10h05	TCI- PBO1	Bacem MNASRI	Diversity of the microsymbiont associated to <i>A. saligna</i> in Tunisia
10h05-10h20	PBO2	Takwa GRITLI	Assessing bacterial community diversity in <i>Medicago sativa</i> grown in different geographic locations in Tunisia
10h20-10h35	PBO3	Sabrine JEDER	The effects of alfalfa-rhizobium symbiosis on intercropping system (grapevine/alfalfa) on agricultural and contaminated soils: Physiological and biochemical parameters
10h35-10h50	PBO4	Karima JALALI	Differential responses to pesticides stresses within four legume species: investigation of main tolerance mechanisms
10h50-11h05	PBO5	Naima SAYAHI	Molecular and physiological mechanisms of tolerance induced by the rhizobacterial S-C2 strain in tomato plants under single and combined abiotic and biotic stresses
9h45-11h05	Room 3 Health Biotechnology 5 oral Communications (HBO1-HBO5)		
Chairmen: Pr. Raja GARGOURI & Dr. Amine Mokhtar DRICI			
9h45-10h05	TCI-HBO1	Sonia KTARI	Molecular approaches for epidemiological surveillance of <i>Streptococcus pneumoniae</i> in the Vaccine Era in Tunisia
10h05-10h20	HBO2	Dorsaf HALLEG	Involvement of oxidative stress in the toxicity mechanism of reproductive and pulmonary function induced by <i>Carlina gummifera</i> L. Incense in male rats
10h20-10h35	HBO3	Salim CHIBENI	Breaking down the complexity of <i>Mycoplasma hominis</i> genome involved in two distinct pathological conditions
10h35-10h50	HBO4	Rihab DERBEL	miR-34-5p expression in the spermatozoa of patients with asthenozoospermia
10h50-11h05	HBO5	Raja AMRI	ANKL, OPG and Runx2 expression and epigenetic modifications in giant cell tumor of bone: Association with Clinicopathological Characteristics and recurrence
11h05-11h25	Coffee Break		

Tuesday Morning: 19/12/2023 (continued)			
11h30-12h50	3 Parallel Sessions		
	Room 1: Bioactive Molecules 5 Oral communications (BMO6-BMO10)		
Chairmen : Pr. Bacem MNASRI & Pr. Abdelmajid KROUMA			
11h30-11h50	TC2-BMO6	Ines FEKI	Potential protective effect of Thymelaea hirsuta extract against testosterone-induced benign prostatic hyperplasia in rats
11h50-12h05	MBO7	Aymen SOUID	Evaluation of the antioxidant and lipid-lowering effect of <i>Salicornia europaea</i> as preventive to the induction of TAFLD in rats
12h05-12h20	BMO8	Sarra YOUSFI	<i>Bacillus velezensis</i> 32a: a treasure trove of secondary metabolites and their synergistic bioactivity against crown gall disease
12h20-12h35	BMO9	Ameni KETATA	Purification, chemical and structural characterization of novel thermophilic glycolipids from <i>Bacillus sp</i> BH1 made of carotenoids esters
12h35-12h50	BMO10	Emna SELLAMI	A novel exopolysaccharide from <i>Erwinia sp</i> : Production, chemical and structural characterization
	Room 2: Plant Biotechnology 5 Oral communications PB6-PB10		
	Chairmen : Dr. Karim KADRI & Pr. Lotfi FKI		
11h30-11h50	TC2- PBO6	Salama AISSAM	Salicylic Acid and Arbuscular Mycorrhizal Fungi application Mitigate Salt Stress Toxicity in <i>Stevia rebaudiana</i> plants
11h50-12h05	PBO7	Jaweher SDIRI GHIDAWI	Effect of the plant growth-promoting bacteria strain <i>Bacillus mojavensis</i> I4 on potato subjected to salt stress
12h05-12h20	PBO8	Aliou Moussa DIOUF	Microbiome Profiling of Bayoud-infected and not Infected Date Palm Plants Reveals the Important Role of the Actinomycetes Population in Disease Suppression
12h20-12h35	PBO9	Amine EL KHOUNI	Comparison of a static and dynamic fertilization programs on olive trees grown under a high-density planting system
12h35-12h50	PBO10	Olfa FRIKHA GARGOURI	Bacterial endophytes inhabiting desert plants provide protection against seed rot caused by <i>Fusarium verticillioides</i> and promote growth in maize
	Room 3: Health biotechnology 3 Oral communications (HBO6-HBO8)		
	Chairmen: Pr Kaïs JAMOSSI & Dr. Sonia KTARI		
11h30-11h50	TC2-HBO6	Amine Mokhtar DRICI	Decipher the genomic complexity of gastric cancer in an algerian population
11h50-12h05	HBO7	Yassine CHTOUROU	Naringin, ID6.chlorogenic acid and quercetin mixtures modulates cardio-myopathy apoptosis and necroptosis via ROS/NF-κB and RIP1/RIP3/MLKL signaling in

			diabetic aged rats: A multimodal approach combining experimental and in silico molecular docking studies
12h05-12h20	HBO8	Emna HAMDI	Nanobody derived from immunized dromedary specifically recognizing KPC-3 class A serine- β -lactamase
13h	Lunch		
14h30-15h30	Poster Session: Discussion		
	Bioactive Molecules		BMP1-BMP43
	Plant Biotechnology		PBP1-PBP37
15h35-16h05	Plenary Conference 3		
	Chairmen: Pr. Samir BEJAR & Pr. Oumèma NOURI ELLOUZ		
15h35-16h05	Cf3: Raja MOKDAD GARGOURI		Contribution of Next-Generation Sequencing (NGS) in the outcome of cancer patients in the South of Tunisia
16h10-18h00	3 Parallel Sessions		
	Room1: Bioactive Molecules 5 Oral communications (BMO11-BMO15) Pr. Walid HAMADA & Dr. Mohamed Najib SAIDI		
16h10-16h30	TC4-BMO11	Rayen OUALBANI	Quantitative analysis by LC-MS/MS and pharmacological evaluation of an endemic geophyte
16h30-16h45	BMO12	Sawsen ELHISS	Hyaluronic acid from Bluefin tuna by-product: Structural analysis and pharmacological activities
16h45-17h00	BMO13	Sawssen BEN CHIKHA	Composition and Anticoagulant Potential of Chondroitin Sulfate and Dermatan Sulfate from Inedibles Parts of Garfish (<i>Belone belone</i>)
17h00-17h15	BMO14	Olfa HBAIEB	Performance Evaluation of Supercritical CO ₂ Technique in Date Stone Oil Extraction
17h15-17h30	BMO15	Ola ABDELHEDI	Proteolysis coupled with membrane separation for the isolation of bioactive peptides from defatted smooth hound byproduct proteins
	Room 2: Plant Biotechnology 7 Oral Communications (PBO11-PBO15)		
	Chairmen: Pr. Faïçal BRINI & Pr. Aissam SALAMA		
16h10-16h30	TC3-PBO11	Karim KADRI	Contribution to the analysis of molecular polymorphism in a collection of date palms (<i>Phoenix dactylifera</i> L.) formed by Tunisian and Indian cultivars
16h30-16h45	PBO12	Hatem BOUBAKRI	Genome-wide identification and expression analysis revealed the involvement of brachypodium <i>H-Type thioredoxin</i> gene family in abiotic stress response
16h45-17h00	PBO13	Walid ABIDI	Mitigating drought stress by compost fertilization in olive (cv. Arbequina) conducted in super high density

17h00-17h15	PBO14	Siwar GHANMI	Isolation and molecular characterization of an FSK2-type dehydrin from <i>Atriplex halimus</i>
17h15-17h30	PBO15	Hanen KAMOUN	The thioredoxin h-type TdTrxh2 protein of durum wheat confers abiotic stress tolerance in transgenic <i>Arabidopsis</i> plants through its protective role and the regulation of redox homeostasis
17h30-17h45	PBO16	Ikram ZRIBI	The Wheat Pathogenesis-Related Protein (TdPR1.2) enhanced tolerance to abiotic and biotic stresses in transgenic <i>Arabidopsis</i> plants
17h45-18h00	PBO17	Rim NEFFISSI	Transcriptomic analysis of salt stress response in barley leaves
	Room 3: Industrial Biotechnology 5 Oral Communications (IBO1-IBO5)		
Chairmen: Pr. Hafedh BELGUTH & Pr. Billal ZENATI			
16h10-16h30	TC1-IBO1	Manel MECHMECHE	A novel coating approach by the development of an edible biopolymers of tomato seed by products to improve strawberries nutritional quality during storage
16h30-16h45	IBO2	Fatma KALLEL	Effect of enzymatic treatments and microfiltration on the physicochemical properties and antioxidant activities of two Tunisian prickly pear juices
16h45-17h00	IBO3	Emna MOUJEHED	A cleaning and efficient approach to improve sheepleather quality by enzymatic degreasing
17h00-17h15	IBO4	Imène AMMAR	Optimization of gluten-free sponge cake fortified with whey protein concentrate using mixture design methodology
17h15-17h30	IBO5	Ahlem ATOUI	Factors affecting the milk yield and composition over lactation of local goat in arid regions
18h00-19h00	Poster Session: Display and Discussion		
	Environmental Biotechnology EBP1-EBP26		
	Health Biotechnology HBP1-HBP25		
	Industrial Biotechnology IBP1-IBP11		
20h	Dinner		
	Wednesday 20/12/2023		
9h00-9h40	Plenary Conference 4 Chairmen: Pr. Slim TOUNSI & Pr. Nouredine ALLOUCHE		
	Cf4 : Pr. Hojeong KANG	Soil Microbes as a Driver of Global Carbon Cycle	
	3 Parallel oral sessions		
	Room 1: Bioactive Molecules 4 Oral communications (BMO17-BMO19)		
	Chairmen: Dr. Olfa FRIKHA GARGOURI & Pr. Hichem BEN SALAH		

9h45-10h05	TC3- BMO16	Firas FEKI	Development of natural emulsifier from <i>Pistacia lentiscus</i> fruit residue for O/W nanoemulsions formulation
10h05-10h20	BMO17	Ines DHOUB	Pyrazole and pyrazolone derivatives as specific α -glucosidase inhibitors: in vitro combined with in silico, hemolytic and cytotoxicity studies
10h20-10h35	BMO18	Mouna BEN HAMMOUDA	Physicochemical, phytochemical and bioactive compounds profiles changes during the aging process of prickly pear vinegar
10h35-10h50	BMO19	Hajer BOUGATEF	Development of a novel method for the purification of phycocyanin pigment from <i>Spirulina platensis</i> and evaluation of its anticancer properties

**Room 2: Environmental Biotechnology
9 Oral communications (EBO4-EBO1)**

Chairmen: Pr. Mohamed CHAMKHA & Pr. Naima TEDJARI

9h45-10h05	TC1-EBO1	Nourhène BOUDHRIOUA	Optimization of DIC-Tripolium ecofriendly extraction process for oleuropein recovery from olive leaves and improvement of the antioxidant and antidiabetic activities of the extracts
10h05-10h20	EBO2	Rabia CHERFOUH	Contribution to the knowledge of olive by-products and the environmental impact of the activity of the olive oil extraction plants of Tizi-Ouzou, Algeria
10h20-10h35	EBO3	Fatma HADRICH	Olive Mill Waste Water (OMW): Recovery of components with high added value and biomethane potential
10h35-10h50	EBO4	Soumaya DBARA	Effects of oil mill wastes used as eco-fertilizer on pomegranate plants
10h50-11h05	EBO5	Rihab HACHICHA	Mixotrophic cultivation of <i>Chlorella</i> on olive mill wastewater medium: growth kinetics and cellular responses

**Room 3: Industrial Biotechnology (IB)
5 Oral communications (IBO6-IBO12)**

Chairmen: Pr. Bassem JAOUADI & Pr. Amel BOUANENE DERENFED

9h45-10h05	TC2- IBO6	Myriam LAMINE	The recovery of high-added values compounds through an integral green valorization of citrus residual biomass
10h05-10h20	IBO7	Nermine SAYAH	Physical and antioxidant properties of clay/gelatin films enriched with Chamomile extract as active biomaterials
10h20-10h35	IBO8	Fatma BENJEDDOU	Efficiency and sustainability of bio-sourced insecticides: from source to production, for vector control
10h35-10h50	IBO9	Raida ZRIBI	From Next-Generation Sequencing to Nanopore Sequencing technology: Bacterial Genome Assembly, Annotation and Biotechnology finding features
10h50-11h05	IBO10	Iheb BOUKARI	Strategies for improving expression of recombinant human chorionic gonadotropin in Chinese Hamster Ovary (CHO) cells

11h05-11h25

Coffee Break

11h30-13h00	2 Parallel Sessions		
Room 1: Environmental Biotechnology 6 Oral communications (EBO6- EBO11)			
Chairmen: Pr. Imen KHOUNI & Pr. Nizar TLILI			
11h30-11h45	EBO6	Rabii LANWAR	Evaluation of the potential of olive pruned wood in terms of soil fertility
11h45-12h00	EBO7	Mouna JRAOU	Performances of a two-stage anaerobic system for the treatment of fruit and vegetable wastes
12h00-12h15	EBO8	Gharbi YAACOUB	Co-composting of shrimp shell waste and olive leaves: Physico-chemical and agronomic quality assessment
12h15-12h30	EBO9	Linda JAMMELI	Potential plant seeds as sustainable green coagulant for soya oil refinery wastewater treatment: Optimization Through Response Surface Methodology
12h30-12h45	EBO10	Nadia ZARAI JAOUADI	Purification and biochemical characterization of a new peroxidase from prickly pear racket <i>Opuntia ficus-indica</i> and its application in detergents formulation and textile dyes biodegradation
12h45-13h00	EBO11	Besma DEBBABI	Effect of the use of Biological Hydro-Retainers on Soil Microbiology properties and plant Physiology irrigated by Treated Urban Wastewater
Room 2 : Industrial Biotechnology 5 Oral Communications (IBO1-IBO5)			
	Chairmen: Pr. Riadh Ben SALAH & Pr. Karima BELGUITH		
11h45-12h05	IBO11	Mouna JLIDI	Isolation and Characterization of marine <i>Bacillus</i> spp. as potential probiotic to Fight Aquaculture Bacterial Diseases
12h05-12h20	IBO12	Nawel BOUCHERBA	Production, purification and characterization of lipase from <i>streptomyces</i> Strain 22dz
12h20-12h35	IBO13	Jaehyun LEE	Soil organic carbone is a key determinant of CH4 sink in global forest soil
12h35-12h50	IBO14	Marwa GDOURA BEN AMOR	Antibacterial and Antibiofilm Efficacy of Cinnamon (<i>Cinnamomum zeylanicum</i> Blume) Essential Oil against <i>Bacillus cereus</i> group
12h50-13h05	IBO15	Randa BEN AKACHA	Prevalence and virulence factor genes of <i>Bacillus cereus</i> group strains isolated from the dairy farm environment and raw milk in Tunisia
13h00	Lunch		

Wednesday Afternoon 20/12/2023		
14h30-15h30	Poster discussion (continuation & end)	
	Environmental Biotechnology	EBP1-EBP26
	Health Biotechnology	HBP1-HBP25
	Industrial Biotechnology	IBP1-IBP11
15h30- 16h10	Plenary Conference 5	
	Chairmen: Pr. Mohamed CHAMKHA & Pr. Houcine NEILI	

	Cf5: Pr. Ahmed BARKIA	Atheroprotective effect of fish products and co-products	
16h10-17h30	Room1: Environmental Biotechnology (EB)		
	5 Oral Communications (EBO14-EBO21)		
Chairmen: Pr. Nourhène BOUDHRIOUA & Pr. Rym SALAH-TAZDAIT			
16h10-16h30	TC2- EBO12	Sonia JEMLI	A novel cartoon crosslinked β-cyclodextrin polymer for the efficient removal of mercury from aqueous solutions
16h30-16h45	EBO13	Yassine HIDRI	Sewage Sludge valorization under sub-humid Mediterranean conditions : Effect on soil and forage crop (<i>X Triticosecale Wittmack</i>) Quality
16h45-17h00	EBO14	Sonia MBARKI	Combinated effect of cadmium and municipal solid waste compost on soil biochemical proprieties and Lolium Perenne production
17h00-17h15	EBO15	Badreddine SELLAMI	Marine mussels <i>Mytilus galloprovincialis</i> as bioindicator of nanoparticles contamination
17h15-17h30	EBO16	Imen BOUZIDI	Interaction between hydrocarbons and oxidative defense system in Mediterranean mussels <i>Mytilus galloprovincialis</i>
20h00	Dinner		
21h00	Award ceremony		
	Thursday 21/12/2023		
9h30	Concluding and Closing Ceremony		
11h	Departure		