

*Ressources Naturelles*  
*Recherche et Stratégies pour un Développement Durable*

**RENA-2022**

**26-28 mai 2022**

**26 mai 2022**

**Centre de Conférences et de Formation – USMBA**

**08:30** : Accueil des participants

**09:00** : Ouverture du Forum, Séance inaugurale

**SESSION I** : Modérateur : Pr. Benaabidate L.

**10:30-11:15**: Conférence 1 : Pr. **ALAN E. FRYAR** - USING OXYGEN-18 AND DEUTERIUM TO DELINEATE GROUNDWATER RECHARGE AT DIFFERENT SPATIAL AND TEMPORAL SCALES

**11:15-12:00**: Conférence 2: Mr. **OMAR KASSOU** - SUREXPLOITATIONS DES RESSOURCES D'ENERGIES PRIMAIRES FOSSILES : QUELLES ALTERNATIVES POUR UN DEVELOPPEMENT DURABLE AU MAROC

**Pause et visite de Posters 12:00-12:30**

Salle 1 – Thème I & III	Salle 2 – Thème I & III	Salle 3 – Thème II	Salle 4 – Thème II
<b>Rapporteurs</b> : Prs. A. Lazraq & R. Lahlali	<b>Rapporteurs</b> : Prs. Al Figuigui J & El Guarouani A	<b>Rapporteurs</b> : Prs. Atmani M & Echchgadda G	<b>Rapporteurs</b> : Prs. Benjelloun M & Mokhtari N
<b>12:30-12:40</b> <i>Contribution à l'évaluation de l'impact des eaux usées sur le milieu marin atlantique du Sud marocain: littoral de Sidi Ifni</i> ABBASSI M.& Al.	<b>12:30-12:40</b> <i>Wheat straw activated carbon as a potential adsorbent for the removal of organic pollutants</i> BENHADJ M.& Al.	<b>12:30-12:40</b> <i>Assessment of tropospheric nitrogen dioxide (NO<sub>2</sub>) levels on the COVID-19 pandemic in Morocco</i> TABYAOUI H.& Al.	<b>12:30-12:40</b> <i>Effet antioxydant, antiglycation et antihyperglycémiant de l'huile des grains d'opuntia ficus indica L, in vitro et in vivo.</i> ABDNIM R.& Al.
<b>12:40-12:50</b> <i>La dégradation des polluants organiques par un procédé d'oxydation avancée (Electro Fenton): étude de l'évolution et optimisation</i> ADACHI A.& Al.	<b>12:40-12:50</b> <i>Valorisation du patrimoine naturel du Biosphère intercontinentale méditerranéenne Marocaine : exemple de la SIBE de Jbel Moussa</i> BOUAZZA S.& Al.	<b>12:40-12:50</b> <i>Acute and subacute toxicity of the methanolic extract of lemon verbena</i> ABOUYAALA O.& Al.	<b>12:40-12:50</b> <i>Comparative study between the by-products from artisanal and modern extraction of argane oil</i> ALOUIZ I.& Al.
<b>12:50-13:00</b> <i>Culture of protoceratium reticulatum, a potentially toxic dinoflagellate isolated from the waters off imiouaddar agadir/morocco.</i> ALKHATIB H.& Al.	<b>12:50-13:00</b> <i>In vitro culture protocol, micropropagation, rooting and acclimatization of Spathiphyllum wallisii plant using shoot tip</i> BOUDADI I.& Al.	<b>12:50-13:00</b> <i>Composition chimique et activité antibactérienne des extraits méthanoliques et aqueux des fleurs du Papaver Rhoëas L.</i> AFQIR H.& Al.	<b>12:50-13:00</b> <i>Treatment of Landfill leachate from Fez city USING sonophoto-Fenton process</i> BELLOUK H.& Al.

<p><b>13:00-13:10</b>  <i>Purification of Moroccan phosphoric acid via a novel dissolution-precipitation technique</i>  <b>BEN ATAYA K.&amp; Al.</b></p>	<p><b>13:00-13:10</b>  <i>Impact du stress hydrique sur la biodiversité planctonique de la retenue de barrage Youssef Ben Tachafine (Souss Massa, Maroc)</i>  <b>BOUDARFA F.&amp; Al.</b></p>	<p><b>13:00-13:10</b>  <i>Potent Antihyperglycemic Effect of Matthiola Maroccana in Normal and Streptozotocin-Induced Diabetic Rats</i>  <b>AMSSAYEF A.&amp; Al.</b></p>	<p><b>13:00-13:10</b>  <i>Effect of Calamintha officinalis on Vascular Contractility and Angiotensin-Converting Enzyme-2</i>  <b>AZZANE A.&amp; Al.</b></p>
<p><b>13:10-13:20</b>  <i>Effect of mother corm genotype and planting site environment on vegetative propagation of Moroccan saffron (Crocus sativus L.)</i>  <b>BEN EL CAID M.&amp; Al.</b></p>	<p><b>13 :10-13 :20</b>  <i>Responses of four moroccan barley (hordeum vulgare l) varieties under salt stress at vegetative growth stage.</i>  <b>BOUHRAOUA S&amp; Al.</b></p>	<p><b>13:10-13:20</b>  <i>The diversity of actinomycetes in Moroccan arid zone</i>  <b>BANANE B&amp; Al.</b></p>	<p><b>13:10-13:20</b>  <i>Effect of the aromatization with thymus vulgaris essential oil on extra virgin olive oil oxidative stability Effect of the aromatization with</i>  <b>BELBACHIR Y.&amp; Al.</b></p>
<p><b>13:20-13:30</b>  <i>Effet inhibiteur du citrate de caféine sur le pouvoir entartrant des eaux</i>  <b>BEN-AAZZA S.&amp; Al.</b></p>	<p><b>13:20-13:30</b>  <i>Treatment of a landfill leachate from Casablanca city by a coagulation-flocculation and adsorption process using a palm bark powder (PBP)</i>  <b>CHAOUKI Z.&amp; Al.</b></p>	<p><b>13:20-13:30</b>  <i>Effect of finishing diet on the carcass characteristics and meat quality of the Beni-Guil PGI sheep</i>  <b>BELHAJ K&amp; Al.</b></p>	<p><b>13:20-13:30</b>  <i>Characterization, immobilization and evaluation of bacteriocins produced by lactic acid bacteria isolated from several artisanal food products of Moroccan origin.</i>  <b>BENKIRANE G.&amp; Al.</b></p>

**Déjeuner 13:30-14:30**

**SESSION II : Modérateur : Pr. Lahlali R.**

**14:30-15:20 Conférence 3 : Pr. ADAM M. MILEWSKI - IMPROVING OUR UNDERSTANDING OF DRYLAND GROUNDWATER RECHARGE DYNAMICS USING REMOTE SENSING, MODELING, AND MACHINE LEARNING**

Salle 1 – Thème I & III	Salle 2 – Thème I & III	Salle 3 – Thème II	Salle 4 – Thème II
<p><b>Rapporteurs :Prs. Azzouzi A &amp; Echchgadda G</b></p>	<p><b>Rapporteurs : Prs. Bouchama E &amp; Belmalha S</b></p>	<p><b>Rapporteurs : Prs. Derraz K &amp; Akki R</b></p>	<p><b>Rapporteurs : Prs. EL Ghadraoui L &amp; Lahlali R</b></p>
<p><b>15:20-15:30</b>  <i>The Study of different factors on seeds germination of Acinosalpinus subsp. Meridionalis and FTIR analysis of their composition</i>  <b>CHERRATE M.&amp; Al.</b></p>	<p><b>15:20-15:30</b>  <i>Importance of wild edible plants in several types of traditional uses.</i>  <b>ESSAIH S.&amp; Al.</b></p>	<p><b>15:20-15:30</b>  <i>Evaluation of the preventive effect of a medicinal plant against alloxan-induced diabetes in mice</i>  <b>BOUKNANA S.&amp; Al.</b></p>	<p><b>15:20-15:30</b>  <i>Faba bean-cereals intercropping for biological control of black bean aphids in Meknes region, Morocco</i>  <b>BOUTAGAYOUT A.&amp; Al.</b></p>
<p><b>15:30-15:40</b>  <i>Towards a green &amp; ecological revolution: a review of biocomposites and bio-hybrid composites with natural reinforcement</i>  <b>CHICHANE A.&amp; Al.</b></p>	<p><b>15:30-15:40</b>  <i>Characterization and pathogenicity of Fusarium species associated with root rot of sugar beet in Morocco.</i>  <b>FARHAOUI A.&amp; Al.</b></p>	<p><b>15:30-15:40</b>  <i>Antimicrobial activities of Micromeria graeca from the province of Taza Northern Morocco</i>  <b>CHTIBI H.&amp; Al.</b></p>	<p><b>15:30-15:40</b>  <i>The Chiropteran population of the Safi region (Morocco): First results of a phenological monitoring.</i>  <b>DBIBA Y.&amp; Al.</b></p>
<p><b>15:40-15:50</b>  <i>Evaluation de l'effet hypotenseur et la toxicité aiguë de Cistus ladaniferus L., Petroselinum Crispum (Mill.), Rosmarinus Officinalis L. et leur Combinaison.</i>  <b>DRIOUECH M.&amp; Al.</b></p>	<p><b>15:40-15:50</b>  <i>Variabilitéspatiotemporelle des dinoflagellés dans le littoral Aglou-Sidilfni (Côte Atlantique Marocaine).</i>  <b>GALLOULI E.M.&amp; Al.</b></p>	<p><b>15:40-15:50</b>  <i>Lycopene extraction from tomato processing by-products using an eco-friendly ketone solvent : a green valorisation approach.</i>  <b>EL BASETT H.&amp; Al.</b></p>	<p><b>15:40-15:50</b>  <i>Comparative study between the by-products from artisanal and modern extraction of argane oil</i>  <b>EL KABOUS K.&amp; Al.</b></p>
<p><b>15:50-16:00</b>  <i>Importance écotouristique et état de conservation des Orchidaceae du Parc National de Talassemthane (Nord du Maroc)</i>  <b>EL KARMOUDI Y.&amp; Al.</b></p>	<p><b>15:50-16:00</b>  <i>Ethnobotanical study of medicinal plants in the province of taza (morocco)</i>  <b>GHABBOUR I. &amp; Al.</b></p>	<p><b>15:50-16:00</b>  <i>Mites and ticks (Chelicerata: Acari) parasites of lizards in Morocco</i>  <b>ER-RGUIBI O.&amp; Al.</b></p>	<p><b>15:50-16:00</b>  <i>Potentiel des polymersomes basé sur les polymères miktoarm pour l'encapsulation et la valorisation des ressources naturelles</i>  <b>EL YOUSFI R.&amp; Al.</b></p>

<p><b>16:00-16:10</b>  <i>Evaluation de différents génotypes de fève et fèverole (Vicia faba L.) sous des conditions de stress hydrique et d'ombrage</i>  <b>AJANA G. &amp; Al.</b></p>	<p><b>16:00-16:10</b>  <i>Valorisation des produits de démolition en vertu d'une politique verte</i>  <b>BOUKHLOUF Y. &amp; Al.</b></p>	<p><b>16:00-16:10</b>  <i>The effect of spray drying on the hygroscopicity of sardine (Sardina Pilchardus) by-products protein hydrolysates</i>  <b>ELAISSI M. &amp; Al.</b></p>	<p><b>16:00-16:10</b>  <i>Assessment of anthocyanin content, weight loss and color attributes' changes of five pomegranate varieties (Punica Granatum L) during cold storage</i>  <b>EL-RHOULTAIS C. &amp; Al.</b></p>
<p><b>16:10-16:20</b>  <i>Criblage phytochimique de la Calendula officinalis L. et l'Ammi visnaga L.</i>  <b>BENABDERRAHMANE A. &amp; Al.</b></p>	<p><b>16:10-16:20</b>  <i>Effet des huiles essentielles sur le comportement locomoteur des abeilles domestiques dans les conditions du laboratoire</i>  <b>EL KASMI ALAOUI M. &amp; Al.</b></p>	<p><b>16:10-16:20</b>  <i>Chemical properties and bioactive compounds of pomegranate (punica granatum L.) Juice processed from frozen storage of pomegranate fruit and arils</i>  <b>EL KETTABI Z. &amp; Al.</b></p>	<p><b>16:10-16:20</b>  <i>Effectiveness of natural salts to control the citrus postharvest diseases</i>  <b>HAMRANI M. &amp; Al.</b></p>
<b>16:20-16:40 Discussion</b>			
<b>Salle 1 – Thème I &amp; III</b>	<b>Salle 2 – Thème I &amp; III</b>	<b>Salle 3 – Thème II</b>	<b>Salle 4 – Thème II</b>
<b>Rapporteurs : Prs. Haloti S &amp; Benabdelhadi</b>	<b>Rapporteurs : Prs. Mikou K &amp; Belmalha S</b>	<b>Rapporteurs : Prs. Rachiq S &amp; Akki R</b>	<b>Rapporteurs : Prs. Sefrioui S &amp; Chattou Z</b>
<p><b>16:40-16:50</b>  <i>Assessment of how landscape changes impact groundwater dynamics in the Souss-Massa (NSAR)</i>  <b>RICHARDS D. F. &amp; Al.</b></p>	<p><b>16:40-16:50</b>  <i>Ls extensions agricoles au niveau des oasis marocaines : entre valorisation des terres et surexploitation des ressources hydriques ?</i>  <b>THIOMBANE M. &amp; Al.</b></p>	<p><b>16:40-16:50</b>  <i>Développement durable vers une sécurité aérienne plus sûre</i>  <b>HANINE A. &amp; Al.</b></p>	<p><b>16:40-16:50</b>  <i>Effect of olive mills wastewater spreading on telluric actinomycetes diversity</i>  <b>BEROIGUI O. &amp; Al.</b></p>
<p><b>16:50-17:00</b>  <i>Citrus dry root rot disease: common causal agents and management strategies</i>  <b>EZRARI S. &amp; Al.</b></p>	<p><b>16:50-17:00</b>  <i>Effet de la carence en azote et du stade de croissance sur la composition biochimique de scenedesmus obliquus.</i>  <b>FASSI FIHRI R. &amp; Al.</b></p>	<p><b>16:50-17:00</b>  <i>Etude Phytochimiques et Evaluation in vitro de l'Activité Antioxydante des Plantes Médicinales et Aromatiques utilisées dans le traitement de Cancer</i>  <b>EL MEKKAOUI A. &amp; Al.</b></p>	<p><b>16:50-17:00</b>  <i>Conception et implementation d'une base de données géospatiale pour la gestion intégrée des ressources en eau dans la plaine de saïss, maroc</i>  <b>EL GAROUANI M. &amp; Al.</b></p>
<p><b>17:00-17:10</b>  <i>Contribution à l'étude du choix alimentaire des charançons du genre sitophilus</i>  <b>EZ ZOUGGARI A. &amp; Al.</b></p>	<p><b>17:00-17:10</b>  <i>Evaluation organoleptique et physico-chimique des six génotypes de tomate issus des différentes régions du royaume.</i>  <b>FANEDOUL J. &amp; Al.</b></p>	<p><b>17:00-17:10</b>  <i>Application of multivariate optimization for phenolic, flavonoid Compounds and antioxydants extraction from Moroccan Corrigiola Telephiifolia Pourr Roots</i>  <b>EL YAAGOUBI W. &amp; Al.</b></p>	<p><b>17:00-17:10</b>  <i>Antifungal activity of Rosamarinus offinalis thymus vulgaris and Citrus limon essential oils against Malassezia sp yeast strains acquired from dermatologically diseased dogs.</i>  <b>ELALAMI I. &amp; Al.</b></p>
<p><b>17:10-17:20</b>  <i>Morphometric investigation of the Saharan honey bee (Apis mellifera sahariensis Baldensperger, 1932) in southeastern Morocco reveals signs of hybridization</i>  <b>AGLAGANE A. &amp; Al.</b></p>	<p><b>17:10-17:20</b>  <i>Les Karsts du Haut Atlas Central: cas de l'Atlas de Béni Mellal, valorisation et protection (Maroc)</i>  <b>AIIT BARKA A. &amp; Al.</b></p>	<p><b>17:10-17:20</b>  <i>Effect of roasting treatment on phenolic compounds and antioxidant power of Sesamum indicum L seeds</i>  <b>ELHANAFI L. &amp; Al.</b></p>	<p><b>17:10-17:20</b>  <i>Analysis of local onion (Allium Cepa L.) production practices and possible adoption of an agroecology model based on intercropping in the Fez-Meknes region</i>  <b>ELOUATTASSI. Y. &amp; Al.</b></p>
<p><b>17:20-17:30</b>  <i>Diversité floristique et phytogéographie du bassin d'Issen : Une zone sèche semi-aride du Haut Atlas occidental (Centre-Ouest de Maroc)</i>  <b>AIT HADDOU M. &amp; Al.</b></p>	<p><b>17:20-17:30</b>  <i>Treatment of olive mill wastewater by an ecosystem</i>  <b>BOUGASSA R. &amp; Al.</b></p>	<p><b>17:20-17:30</b>  <i>Activités insecticides des huiles essentielles de certaines plantes aromatiques et médicinales méditerranéennes sur Callosobruchus maculatus du pois chiche</i>  <b>HAMMOUMI A. &amp; Al.</b></p>	<p><b>17:20-17:30</b>  <i>Etude des huiles essentielles de cumin au Maroc</i>  <b>MSEGUED AYAM I. &amp; Al.</b></p>

<p><b>17:30-17:40</b>  <i>Prospection et l'identification pomologique et morphologique des géotypes locaux du figuier Ficus carica L. dans le Rif central.</i>  <b>AIT TALEB B.&amp; Al.</b></p>	<p><b>17:30-17:40</b>  <i>Acute and subacute toxicity of the methanolic extract of Melissa officinalis L</i>  <b>BOUGRINE S.&amp; Al.</b></p>	<p><b>17:30-17:40</b>  <i>Enquête ethnobotanique : Plantes Médicinales et Aromatiques, un éventuel bio-conservateur des produits frais</i>  <b>BESSI A.&amp; Al.</b></p>	<p><b>17:30-17:40</b>  <i>Total phenolic content and antioxidant and antimicrobial activities of papaver rhoeas l. Organ extracts growing in taounate region, Morocco</i>  <b>HMAMOU A.&amp; Al.</b></p>
<b>17:40-18:00 Discussion</b>			
<b>Pause et visite de Posters 18:00-18 :20</b>			
<b>Salle 1 – Thème I &amp; III</b>	<b>Salle 2 – Thème I &amp; III</b>	<b>Salle 3 – Thème II</b>	<b>Salle 4 – Thème II</b>
<b>Rapporteurs : Prs. Errachidi F &amp; Mokhtari N</b>	<b>Rapporteurs : Prs. Al Figuigui &amp; Lahlali R</b>	<b>Rapporteurs : Prs. Fatemi Z.A &amp; Echchgadda G</b>	<b>Rapporteurs : Prs. Rais C &amp; Chattou Z</b>
<p><b>18:20-18:30</b>  <i>Potential removal of tannery wastewater hexavalent chromium by indigenous microorganisms</i>  <b>AKÉ A. H. J.&amp; Al.</b></p>	<p><b>18:20-18:30</b>  <i>Développement durable des eaux souterraines de la nappe liasique du bassin de Saïs, Maroc</i>  <b>BOUIB L.&amp; Al.</b></p>	<p><b>18:20-18:30</b>  <i>Analyse comparative de l'utilisation des Huiles essentielles (HEs) leurs nano-émulsions (NEM) ou leurs nano-capsules (NC), seules, en mixture, ou en combinaison avec d'autres technologies alimentaires dans la conservation des denrées.</i>  <b>AMASSMOUD O.&amp; Al.</b></p>	<p><b>18:20-18:30</b>  <i>Extraction of a bioactive compound of Ceratonia Siliqua L. essential oil by supercritical CO2 and antioxidant activity</i>  <b>AMRANI A.&amp; Al.</b></p>
<p><b>18:30-18:40</b>  <i>Valorization Of Plant-Soil Interactions In Aromatic And Medicinal Plant Growth</i>  <b>ALAOUI I.&amp; Al.</b></p>	<p><b>18:30-18:40</b>  <i>Comparative analysis of the symbiotic diversity associated with pomegranate aphids</i>  <b>FAKHOUR S.&amp; Al.</b></p>	<p><b>18:30-18:40</b>  <i>Etude comparative de la biosorption du chrome par le biofilm de W. anomalus fixé sur le bois et la zéolite 13x</i>  <b>ASRI M.&amp; Al.</b></p>	<p><b>18:30-18:40</b>  <i>Preliminary study for the use of phytocompounds for the control of biofilms in food industry</i>  <b>BENAMAR K.&amp; Al.</b></p>
<p><b>18:40-18:50</b>  <i>Caractérisation physico-chimique des déchets de canne à sucre "Saccharum Officinarum (Feuilles et différentes parties de bagasse) : Une étude comparative</i>  <b>BEN TAHAR S.&amp; Al.</b></p>	<p><b>18:40-18:50</b>  <i>Antifungal activity of Rosamarinus offinalis thymus vulgaris and Citrus limon essential oils against Malassezia sp yeast strains acquired from dermatologically diseased dogs.</i>  <b>EL ALAMI I.&amp; Al.</b></p>	<p><b>18:40-18:50</b>  <i>Nutritional and technological assessment of durum wheat-faba bean enriched flours, and sensory quality of developed composite bread</i>  <b>BENAYAD A.&amp; Al.</b></p>	<p><b>18:40-18:50</b>  <i>GC-SM Analysis, Biological activity and safety evaluation of volatile fractions from the peel of Citrus aurantium (L) grown in Northeastern Morocco</i>  <b>BENAYAD O.&amp; Al.</b></p>
<p><b>18:50-19:00</b>  <i>Ormenis mixta (l.) Dumort and artemisia herba-alba asso: ethnomedicinal surveys in northern morocco (taounate region) and an overview of their bioactivities and phytochemistry</i>  <b>BENKHAIRA N.&amp; Al.</b></p>	<p><b>18:50-19:00</b>  <i>On Phenology of Flowering and Fruit Development of Olive (Olea europaea L.,cv'MoroccanPicholine') Grown Under Contrasting Environments in Northern Morocco</i>  <b>EL BAKALI S.&amp; Al.</b></p>	<p><b>18:50-19:00</b>  <i>Application of natural adsorbents for the removal of cationic and anionic dyes from aqueous solutions by fixed bed adsorption</i>  <b>BENCHEQROUN Z.&amp; Al.</b></p>	<p><b>18:50-19:00</b>  <i>Etude anti-hyperglycemique in vitro et ex vivo d'erodium guttatum racinaire l.</i>  <b>BENRAHOU K.&amp; Al.</b></p>
<b>19:00-19:20 Discussion</b>			

## Salle 5 – Thème II

**Rapporteurs : Prs. Rais N & Chattou Z**

<p><b>12:30-12:40</b>  <i>Phenolic Fraction Concentrate of Moroccan Phoenix dacylifera seeds: A promising antioxidant and glucose regulator nutraceutical</i>  <b>BIKRI S.&amp; Al.</b></p>	<p><b>12:40-12:50</b>  <i>Investigation of the biological activities and characterization of bioactive constituents of Cannabis sativa threshing residues through in vivo and in vitro approaches</i>  <b>CHDA A.&amp; Al.</b></p>
<p><b>12:50-13:00</b>  <i>Characterization of bioactive compounds of sweet bay (laurus nobilis l.) From northern morocco</i>  <b>BOUSSAOU D. I.&amp; Al.</b></p>	<p><b>13:00-13:10</b>  <i>Effects of the incorporation of curcuma longa l and zingiber officinale powder on zootechnical</i>  <b>BOUCHAM C.&amp; Al.</b></p>
<p><b>13:10-13:20</b>  <i>Comparative study between some vegetable by-products: Phytochemical analysis and antioxidant activity</i>  <b>EL GUEDDARI L.&amp; Al.</b></p>	<p><b>13:20-13 :30</b>  <i>Assessment of anthocyanin content, weight loss and color attributes' changes of five pomegranate varieties (Punica Granatum L) during cold storage</i>  <b>EL RHOUTTAIS C.&amp; Al.</b></p>

**Déjeuner 13:30-14:30**

**SESSION II : Modérateur : Pr. Lahlali R.**

**14:30-15:20 Conférence 3 : Pr. ADAM M. MILEWSKI - IMPROVING OUR UNDERSTANDING OF DRYLAND GROUNDWATER RECHARGE DYNAMICS USING REMOTE SENSING, MODELING, AND MACHINE LEARNING**

**Rapporteurs : Prs. Benchamsi N. A & Mokhtari N**

<p><b>15:20-15:30</b>  <i>Chemical Composition and Antimicrobial Activity of Bitter Apricot Seed soil</i>  <b>ELHAJJAJI M.A.&amp; Al.</b></p>	<p><b>15:30-15:40</b>  <i>Purification partielle de la trypsine de sardines et mise en évidence d'activités Biologiques</i>  <b>NOUHAILA Z. &amp; Al.</b></p>
<p><b>15:40-15:50</b>  <i>Ethnobotanical survey of aromatic and medicinal plants used in traditional medicine and agri-food in the fes-meknes region.</i>  <b>EL FINOU H.&amp; Al.</b></p>	<p><b>15:50-16:00</b>  <i>Qualité des fruits de divers cultivars de grenadiers : variation phénotypique des traits physico-chimiques et leur stabilité interannuelle</i>  <b>EJJILANI A.&amp; Al.</b></p>
<p><b>16:00-16:10</b>  <i>Extraction and analysis of lipophilic and hydrophilic extractives from different wood sawdusts using accelerated solvent extraction method (ase)</i>  <b>EL HAJAM M.&amp; Al.</b></p>	<p><b>16:10-16:20</b>  <i>Endemic Moroccan Thymus saturoioides Coss As a source of bioactive molecules: From traditional uses to biological activities</i>  <b>EL HACHLAFI N.&amp; Al.</b></p>

**16:20-16:40 Discussion**

**Rapporteurs : Prs. Benabdelhadi M & Akki R**

<p><b>16:40-16:50</b>  <i>Etude de l'évolution des apports d'eau superficielle au niveau du bassin versant de sous-massa (sud du Maroc)</i>  <b>EL-YAZIDI M.&amp; Al.</b></p>	<p><b>16:50-17:00</b>  <i>Characterization of plant growth-promoting mechanisms of rhizobacteria from the rhizosphere of date palms in tafilalet oases</i>  <b>EL KINANY S.&amp; Al.</b></p>
<p><b>17:00-17:10</b>  <i>Combined treatment of T. saturoioides, M. communis and A. herba alba essential oils against E. coli, S. aureus and C. tropicalis: Optimization of antimicrobial activity by mixture design methodology</i>  <b>CHRAIBI M.&amp; Al.</b></p>	<p><b>17:10-17:20</b>  <i>Effet anti hyperglycémiant et inhibiteur de l'absorption intestinale de l'extrait aqueux de Lavandula stoeachs chez les rats</i>  <b>EL RHERABI A.&amp; Al.</b></p>
<p><b>17:20-17:30</b>  <i>Drought stress tolerance study in Moroccan barley (hordeum vulgare l) varieties: photosynthetic approach</i>  <b>FERIOUN M.&amp; Al.</b></p>	<p><b>17:30-17:40</b>  <i>Contribution à la valorisation du fumier des bovins par méthanisation et réutilisation du digestat en agriculture</i>  <b>ERRAJI H.&amp; Al.</b></p>

**17:40-18:00 Discussion**

**18:00-18 :20 Pause et visite de Posters**

*Ressources Naturelles*  
*Recherche et Stratégies pour un Développement Durable*

**RENA-2022**

**26-28 mai 2022**

27 mai 2022

ENA Meknès

08:30 : Accueil des participants

09:00 : Ouverture du Forum, Séance inaugurale

**SESSION I : Modérateur : Lahlali R.**

**10:00-10:45: Conférence 1 : Dr. ANTOINE MANGIN - L'OBSERVATOIRE CLIMATIQUE SCO-LIVE**

**10:45-11:30: Conférence 2: Pr. ABDELFTAH DEROUICHE - LA DOMESTICATION DE L'ARGANIER : UNE AUBAINE NUTRITIONNELLE, THERAPEUTIQUE, SOCIOECONOMIQUE ET ECOLOGIQUE**

Pause et visite de Posters 11:30-12:00

Salle 1 – Thème I	Salle 2 – Thème II	Salle 3 – Thème III
<b>Rapporteurs : Prs. Benjelloun M &amp; Echchgadda G</b>	<b>Rapporteurs : Prs. Bouchama E &amp; Belmalha S</b>	<b>Rapporteurs : Prs. Derraz K &amp; Akki R</b>
<b>12:00-12:10</b> <i>The pathogenic fungus <i>Diplodiaseriatawas</i> shown associated with wood canker on apple in Morocco</i> GOURA K.& Al.	<b>12:00-12:10</b> <i>Total phenolic content and antioxidant and antimicrobial activities of papaver rhoeas l. Organ extracts growing in taounate region, morocco</i> HMAMOU A.& al.	<b>12:00-12:10</b> <i>The scouring phenomenon: a danger for engineering structures</i> NAAZA C.& Al.
<b>12:10-12:20</b> <i>Description of the Gap between Local Agricultural Practices and Agroecological Soil Management tools in Zerhoun and in the Middle Atlas Areas of Morocco.</i> IRHZA A.& Al.	<b>12:10-12:20</b> <i>Etude de la diversité spécifique aviaire dans la haute plaine de Moulouya (Maroc)</i> HMIDANI M.& Al.	<b>12:10-12:20</b> <i>Biological control of gray mold in apples by antagonistic bacteria</i> KHADIRI M.& Al.
<b>12:20-12:30</b> <i>Environnemental effects on growth and sporulation of <i>Lasiodiplodia viticola</i> associated with grapevine trunk diseases in Morocco</i> KENFAOUI J.& Al.	<b>12:20-12:30</b> <i>Cardioprotective potential of a medicinal plant against myocardial ischemia/reperfusion injury in Langendorff perfused rat heart</i> KADI M.& Al.	<b>12:20-12:30</b> <i>Trend assessment of precipitation and drought index (spi) in mediterranean region "All Hoceima province-northern Morocco</i> ZIAN A.& al.
<b>12:30-12:40</b> <i>Capripoxviruses: Isolation, production and diagnosis</i> RHAZI H.& Al.	<b>12:30-12:40</b> <i>Phytochemical analysis, Antispasmodic and Myorelaxant effect of <i>Dysphania ambrosioides</i> L. flowers hydroethanolic extract, and their chloroform and ethyl acetate fractions</i> KANDSI F.& Al.	<b>12:30-12:40</b> <i>Impact of nitrogen fertilization on the spatio-temporal distribution of soil nitrate concentrations in an onion field in the Saiss basin</i> NESSAH C.& Al.



<p><b>12:40-12:50</b>  <i>Age composition of the European hake Merluccius merluccius, Linnaeus, 1758 from the Moroccan Mediterranean Sea</i>  <b>SLIMANI D.&amp; Al.</b></p>	<p><b>12:40-12:50</b>  <i>Valorization potential of saffron flower waste based on antioxidants, antibacterial and natural dyes</i>  <b>LACHGUER K.&amp; Al.</b></p>	<p><b>12:40-12:50</b>  <i>La germination des semences facilitée par le SIG et l'évaluation multidimensionnelle d'Abies marocana Trab. (Pinaceae) pour une conservation et une exploitation durable de l'espèce</i>  <b>KHABBACH A.&amp; Al.</b></p>
<p><b>12:50-13:00</b>  <i>Harmful cyanobacterial blooms control by Moroccan medicinal plant-based algaecides</i>  <b>TEBAA L.&amp; Al.</b></p>	<p><b>12:50-13:00</b>  <i>Antithrombotic activity of Punica granatum and its effects on primary and secondary hemostasis</i>  <b>LAFDIL F.Z.&amp; Al.</b></p>	<p><b>12:50-13:00</b>  <i>Detection and distribution of spiroplasma citri in Moroccan citrus orchards</i>  <b>SAGOUTI A. T.&amp; Al.</b></p>
<b>Déjeuner 13:00-14:15</b>		
<p><b>SESSION II : Modérateur : Echchgadda G.</b>  <b>14:15-14:45 Conférence 3 : Pr. DANIEL PIERRE PETIT - ORIGINE DU PATRIMOINE GENETIQUE OVIN MAROCAIN ET CONNEXIONS AVEC LES AUTRES PAYS MEDITERRANEENS</b>  <b>14:45-15:15 Conférence 4 : Pr. MOHAMMED SERGHINI – VOIES DE CARACTERISATION ET DE VALORISATION DU SAFRAN : PRODUIT DE TERROIR PHARE AU MAROC</b></p>		
<b>Salle 1 – Thème I</b>	<b>Salle 2 – Thème II</b>	<b>Salle 3 – Thème III</b>
<b>Rapporteurs : Prs. Azzouzi A &amp; Mokhtari N</b>	<b>Rapporteurs : Prs. Sefrioui S &amp; Chattou Z</b>	<b>Rapporteurs : Prs. Rais C &amp; Yatribi T</b>
<p><b>15:20-15:30</b>  <i>Utilisation thérapeutique de l'ivette musquée « Ajuga Iva » par des populations locales au Maroc</i>  <b>LAHRIZI L.&amp; Al.</b></p>	<p><b>15:20-15:30</b>  <i>UV visible and FTMIR spectroscopy combined with chemometric tools, as fingerprint green analytical approach for the authentication of local products : case of honey and goat milk.</i>  <b>LAHBABI S.&amp; Al.</b></p>	<p><b>15:20-15:30</b>  <i>Modelling and mapping of water erosion risk by application of the GIS and PAR/CAR method in the Inaouene watershed, Morocco</i>  <b>LAARAJ M.&amp; Al.</b></p>
<p><b>15:30-15:40</b>  <i>Etude qualitative de la farine des larves de la mouche soldat noir.</i>  <b>Ouatman H.&amp; Al.</b></p>	<p><b>15:30-15:40</b>  <i>Composés bioactifs, activités biologiques et produits innovants développés à base du figuier de barbarie Opuntia spp</i>  <b>LAKOUIRBI S.&amp; Al.</b></p>	<p><b>15:30-15:40</b>  <i>In vitro evaluation of the antifungal activity of aqueous extracts of Origanum elongatum against Phytophthora infestans, the causal agent of late blight of potato</i>  <b>HARI A.&amp; Al.</b></p>
<p><b>15:40-15:50</b>  <i>Etude microbiologique de deux procédés d'élaboration du boyau au Maroc</i>  <b>SBAI H.&amp; Al.</b></p>	<p><b>15:40-15:50</b>  <i>Rôle des champignons mycorrhiziens à arbuscules, du compost et des bactéries promotrices de croissance des plantes dans la tolérance de la tomate (Solanum lycopersicum L.) au stress hydrique dans des conditions semi contrôlée.</i>  <b>LAMAIZI S.&amp; Al.</b></p>	<p><b>15:40-15:50</b>  <i>Etude morphométrique de certaines espèces acridiennes du Moyen Atlas et sa contribution à la richesse spécifique.</i>  <b>ZAHRI A.&amp; Al.</b></p>
<p><b>15:50-16:00</b>  <i>Biostimulant effect of soil cyanobacterial consortium on plant growth and physiology of tomato (Solanum lycopersicum L.)</i>  <b>HAKKOUM Z.&amp; Al.</b></p>	<p><b>15:50-16:00</b>  <i>Caractérisation phénotypique, génotypique et symbiotique des rhizobies nodulants Acacia cyanophylla au Maroc.</i>  <b>LEBRAZI S.&amp; Al.</b></p>	<p><b>15:50-16:00</b>  <i>Study of potential capacity for Cr(VI) reduction by Staphylococcus gallinarum strain VIII1 immobilized, resting and permeabilized</i>  <b>HARBOUL K.&amp; Al.</b></p>
<p><b>16:00-16:10</b>  <i>Evaluation of the genetic diversity of a Moroccan apple collection using pomological descriptors.</i>  <b>HOUMANAT K.&amp; Al.</b></p>	<p><b>16:00-16:10</b>  <i>Improved genetic gain through the application of a speed breeding-based extended photoperiod and early generation selection protocol on lentil</i>  <b>MITACHE M.&amp; Al.</b></p>	<p><b>16:00-16:10</b>  <i>Medicinal plants adopted to treat children's diseases by traditional pediatrics "women healers" in the Souss Massa region (Agadir Idaoutanan, Inzegane Ait Meloul and Chtouka Ait Baha) Morocco</i>  <b>TALEB A. K. &amp; Al.</b></p>

<p><b>16:10-16:20</b>  <i>Ethnobotanical study of medicinal plants in northern Morocco: case of Mernissa (Taounate region)</i>  <b>JEDDI M.&amp; Al.</b></p>	<p><b>16:10-16:20</b>  <i>Synthesis, characterization and biological activity of pyrazole-tetrazole compounds</i>  <b>Oulous A.&amp; Al.</b></p>	<p><b>16:10-16:20</b>  <i>Les règles de gestion en commun de l'eau d'irrigation au niveau des palmerais marocaines</i>  <b>YAHYA A.&amp; Al.</b></p>
<b>16:20-16:40 Discussion</b>		
<b>Salle 1 – Thème I</b>	<b>Salle 2 – Thème II</b>	<b>Salle 3 – Thème II</b>
<b>Rapporteurs : Prs. Fatemi Z.A &amp; Lahlali R</b>	<b>Rapporteurs : Prs. Benabdelhadi M &amp; Larbi A</b>	<b>Rapporteurs : Prs. Mikou K &amp; Echchgadda G</b>
<p><b>16:40-16:50</b>  <i>Caractérisations physique, physico-chimique et biochimique et recherche des composés bioactifs des cladodes du figuier de barbarie <i>Opuntia stricta</i> (Haw.) Haw.</i>  <b>LAHMIDI S.&amp; Al.</b></p>	<p><b>16:40-16:50</b>  <i>Corrosion inhibition of mild steel by an organic compound in molar hydrochloric acid solution</i>  <b>SETTI N.&amp; Al.</b></p>	<p><b>16:40-16:50</b>  <i>Acute toxicity, phytochemical screening, and antimutagenic activity of <i>Pistacia lentiscus</i> L. extracts from the eastern region of Morocco and study of the chemical composition of its essential oils.</i>  <b>SEDDOQI S.&amp; Al.</b></p>
<p><b>16:50-17:00</b>  <i>Biocontrol of dieback disease of olive trees (<i>Olea europaea</i> L.) caused by <i>Pythium schmittii</i> by means of antagonistic bacteria</i>  <b>LEGRIFI I.&amp; Al.</b></p>	<p><b>16:50-17:00</b>  <i>Optimization of polyphenol extraction from three parts of <i>Chamaerops humilis</i> L. (leaves, fruit and pulp) through response surface methodology.</i>  <b>NEKHLA H.&amp; Al.</b></p>	<p><b>16:50-17:00</b>  <i>Antibacterial and antibiotic potentiating activities of essential oil from Moroccan endemic <i>Lavandula maroccana</i> Murb.</i>  <b>SOULAIMANI B.&amp; Al.</b></p>
<p><b>17:00-17:10</b>  <i>Vasorelaxant effect of ethanolic extract of <i>Cannabis sativa</i> on rat mesenteric arterial bed is NO and EDHF dependent.</i>  <b>MAHOU Y.&amp; Al.</b></p>	<p><b>17:00-17:10</b>  <i>Effect of some agroecological practices on yield and weed management associated with the cultivation of mint <i>Mentha spicata</i> L.</i>  <b>RHIOUI W.&amp; Al.</b></p>	<p><b>17:00-17:10</b>  <i>Chemical composition, of hempseed cakes produced in Morocco: as a local product of Moroccan northern region</i>  <b>TAAIFI Y.&amp; Al.</b></p>
<p><b>17:10-17:20</b>  <i>Effect of excessive nitrate and phosphate on the growth of the potentially harmful dinoflagellate <i>Coolia</i> sp from the Moroccan Atlantic.</i>  <b>MOUSSAVOU-MOUIY C. A.&amp; Al.</b></p>	<p><b>17:10-17:20</b>  <i>Physicochemical characterization, heavy metals concentration and enzyme activities in agricultural soil of Saiss plain, Morocco.</i>  <b>ZERRARI N.&amp; Al.</b></p>	<p><b>17:10-17:20</b>  <i>Molecular characterization of <i>tolcndv</i> affecting cucurbits and solanaceous crops in Morocco</i>  <b>RADOUANE N.&amp; Al.</b></p>
<p><b>17:20-17:30</b>  <i>Mise en valeur du potentiel nutritionnel et thérapeutique des différents espèces du genre <i>Urtica</i>: Enquête ethnobotanique usages médicinales et agricoles</i>  <b>NGADI M.&amp; Al.</b></p>	<p><b>17:20-17:30</b>  <i>Amélioration de la croissance des plantes et de la tolérance au stress salin, à l'aide de rhizobactéries favorisant la croissance des plantes (PGPR) associées aux pruniers (<i>Prunus domestica</i>)</i>  <b>ESSALIMI B.&amp; Al.</b></p>	<p><b>17:20-17:30</b>  <i>Plan de mélange pour l'optimisation du rendement en composés phénoliques des déchets de la plante du safran (<i>Crocus sativus</i> L)</i>  <b>SLIMANI C.&amp; Al.</b></p>
<p><b>17:30-17:40</b>  <i>Biochar et gestion durable des déchets agricoles</i>  <b>REHALI M.&amp; Al.</b></p>	<p><b>17:30-17:40</b>  <i>Immunostimulant effect of <i>Brassica rapa</i> and <i>Raphanus sativus</i> seeds on thymic cells and their cytotoxicity.</i>  <b>LAARAJ S.&amp; Al.</b></p>	<p><b>17:30-17:40</b>  <i>Biochemical and morphometric study of two flax varieties selected for construction field</i>  <b>ZRARA K.&amp; Al.</b></p>
<b>17:40-18:00 Discussion</b>		
<b>Pause et visite de Posters 18:00-18 :20</b>		



Salle 1 – Thème I	Salle 2 – Thème II	Salle 3 – Thème II
<b>Rapporteurs : Prs. Fadil F &amp; Belmalha S</b>	<b>Rapporteurs : Prs. Errachidi F &amp; Akki R</b>	<b>Rapporteurs : Prs. Al Figuigui &amp; Mokhtari N</b>
<b>18:20-18:30</b> <i>Enquête éthnopharmacologique sur l'usage des urines des dromadaires dans lamédecinetraditionnelledela population locale delarégiondeDakhlaOued Ed-dahab.</i> <b>SALMI M.&amp; Al.</b>	<b>18:20-18:30</b> <i>Biofertilizing effect of soil microalgae Chlorella sp. on wheat (Triticum aestivum, var. Achar) germination and growth</i> <b>MINAOUI F.&amp; Al.</b>	<b>18:20-18:30</b> <i>Effect of solvents on the extraction of phenolic compounds, chemical composition and antioxidant activity of Wormwood.</i> <b>HBIKA A.&amp; Al.</b>
<b>18:30-18:40</b> <i>Evolution of forest fires, burned areas and impacted species in the Middle Atlas forests (Morocco) from 2000 to 2020</i> <b>SERBOUTI S.&amp; Al.</b>	<b>18:30-18:40</b> <i>Optimisation de l'extraction des composés phénoliques des coproduits de la plante Cannabis sativa L., exploitation des outils statistique : Méthodologie de Surface de Réponse</i> <b>RAIS S.&amp; Al.</b>	<b>18:30-18:40</b> <i>The use of antagonistic bacteria in combination with sodium bicarbonate to control the brown rot disease of stone fruits</i> <b>LYOUSFI N,&amp; Al.</b>
<b>18:40-18:50</b> <i>Growth and phenological stages of fig tree (Ficus carica L.) in northern of Morocco</i> <b>SOUILAH Y.&amp; Al.</b>	<b>18:40-18:50</b> <i>Dissection of drought tolerance and recovery in lentil (Lens culinaris, Medik) using canopeo application as a high-throughput phenotyping tool</i> <b>ZEROUALI A.&amp; Al.</b>	<b>18:40-18:50</b> <i>Crataegus Oxyacantha extracts as biostimulants to enhance salt tolerance in tomato plants</i> <b>NABOULSI I.&amp; Al.</b>
<b>18:50-19:00</b> <i>Activité antibactérienne de Ononis natrix sur des bactéries Gram positif du milieu marin</i> <b>EL OUAHMANI N.&amp; Al.</b>	<b>18:50-19:00</b> <i>Enquete sur la consommation des viandes de poulet de chair dans la region de fes filali</i> <b>SAMOUIH K.&amp; Al.</b>	<b>18:50-19:00</b> <i>Insecticidal effect of wild-grown Mentha pulegium and Rosmarinus officinalis essential oils and their main monoterpenes against Culex pipiens (Diptera: Culicidae)</i> <b>RAMZI A.&amp; Al.</b>
<b>19:00-19:10</b>	<b>19:00-19:10</b> <i>Place, rôle et durabilité des systèmes de production mixtes culture-élevage dans les exploitations agricoles en zones périurbaines de Casablanca et de Rabat (Maroc)</i> <b>HAKIMI F.&amp; Al.</b>	<b>19:00-19:10</b> <i>Effet de différents pratiques agroécologiques sur la gestion des adventices du pois-chiche et l'amélioration de son rendement</i> <b>ZOUHAR M.&amp; Al.</b>
<b>19:00-19:20 Discussion</b>		

28 mai 2022

## Visite de la zone des Rides Sud-Rifaines

07h30 : Départ de la FST de Fès vers l'ENA de Meknès

09h00 : Départ de Meknès vers les Rides

Visite Bab Remila

Visite My Idris Zarhoun

Visite de l'Aqueduc

Volubilis