



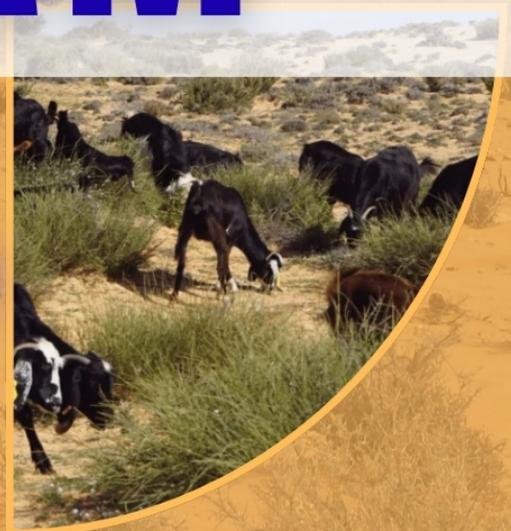
SIEFAD 2025

PROGRAM

*International Seminar on
Livestock and Wildlife
in Arid and Desert Regions*

**Livestock, Biodiversity, and
Technologies: Towards a Sustainable
Future in Arid Environments**

NOVEMBER 4-6, 2025, DJERBA - TUNISIA



DESIGNED BY AEF MAHOUBI - IRA 2025

REPUBLIQUE TUNISIENNE

Ministère de l'Agriculture, des Ressources Hydrauliques
et de la Pêche

Institut des Régions Arides, Médenine



International Seminar on Livestock and Wildlife in Arid and Desert Regions



Djerba - Tunisia, November 4th – 6th 2025

PROGRAM

Day 1: Tuesday, November 04th, 2025

	07:30-09:00	Registration	
	09:00-10:30	SIEFAD²⁰²⁵ Opening Ceremony	
	10:30-11:00	Coffee break	
ROOM 1	11:00-11:25	<i>Orientations et priorités stratégiques de l'Office d'Elevage & de Pâturages : Directeur Général (OEP)</i>	
	11:25-11:50	<i>Les grandes lignes de la stratégie nationale de gestion et de développement durable des forêts à l'horizon 2050 : Directeur Général (DGF)</i>	
	11:50-12:15	<i>Programme national de la biodiversité et de la conservation de la nature : Directeur de l'Ecologie et des Milieux Naturels au Ministère de l'Environnement</i>	
	12:15-13:00	<i>Keynote lecture 1: Hichem BEN SALEM: Bridging research gaps for resilient and productive livestock systems</i>	
	13:00-14:30	Lunch & Break	
	14:30-15:10	<i>Keynote lecture 2: Ahmed RJEB : Concept One Health: vers une stratégie de santé globale</i>	
	THEME I: Biology, behaviour & animal health		President: Ahmed RJEB
			Rapporteur: Hichen BEN SALEM
ROOM 1	15:10-15:20	Adnane ANAS	OP1.1: Diarrhea in newborn camel calves in Morocco
	15:20-15:30	Fouziyah S. ALGHANAY	OP1.2: Epidemiological risk analysis and its role in combating animal diseases in Libya
	15:30-15:40	Asma DHEHIBI	OP1.3: Nanobodies-based system for High-Sensitivity detection of <i>Escherichia coli</i> in a diarrhea camel feces sample
	15:40-15:50	Soraya NOURY	OP1.4: Toward a One Health approach for controlling caseous lymphadenitis in Moroccan small ruminants
	15:50-16:00	Dounya A. BEDBOUKI	OP1.5: The role of Ragdalin Veterinary Laboratory in combating animal and transboundary diseases
	16:00-16:10	Mabrouk M. SEDDIK	OP1.6: Sanitary status of camel livestock in southern Tunisia and proposals for improvement
	16:10-16:30	Discussion & Outcomes	
	16:30-16:50	Coffee break	
	THEME I: Biology, behaviour & animal health		President: Sghaier NAJARI
			Rapporteur: Mabrouk M. SEDDIK
ROOM 1	16:50-17:00	Mouna FRIHA	OP1.7: Grazing behavior of ewes reared on saline rangeland of the archipelago of Kerkennah
	17:00-17:10	Eya GHERAIRI	OP1.8: Impact of maternal contact on metabolic and physiological stress during weaning in D'man lambs
	17:10-17:20	Amor A. BELKHIR	OP1.9: Feeding behavior of camels in their natural environment
	17:20-17:30	Assia AMOKRANE	OP1.10: Adaptations endocrinienne, métabolique et minérale chez les races ovines Ouled Djellal et D'Man face aux conditions arides du désert
	17:30-17:40	Sofiane BOUDALIA	OP1.11: Adapting Goat Pastoralism to Climate Change in Algeria: Insights from the ARICA CSL4MENA Project
	17:40-18:00	Discussion & Outcomes	
	18:00-18:10	Marwa BRAHMI	OP1.12: Behavioral response of dairy camels during machine milking: Vigilance and welfare indicators
	18:10-18:20	Moufida ATIGUI	OP1.13: Unveiling milkability patterns in two resilient dairy species: the italian buffalo and the Maghrebi camel
	18:20-18:30	Mohammed EL KHASMI	OP1.14: A survey on pre-slaughter stress conditions and behavioral responses in camels from Moroccan rural and urban slaughterhouses during summer season
18:30-18:40	Sihem MBAREK	OP1.15: Sustainable valorisation of olive mill wastewater as a neuroprotective agent for Tunisian <i>Psammomys obesus</i> rodent wildlife	

	18:40-18:50	Souhaieb CHRIGUI	OP1.16: Chemical composition, antioxidant and antimicrobial activities of Tunisian <i>Salsola vermiculata</i> L.
	18:50-19:10	Discussion & Outcomes	
Day 1: Tuesday, November 04th, 2025			
ROOM 2	THEME III: Quality of animal products		President: Mokhtar MAHOUACHI
	Rapporteur: Amel SBOUI		
	15:10-15:20	Isabelle ADT	OP3.1: Comparison of <i>in vitro</i> antioxidant activity and switchSENSE®-based metal-binding properties of enzymatic hydrolysates of dromedary and bovine alpha-lactalbumin and total dromedary whey protein
	15:20-15:30	Isabelle ADT	OP3.2: Evaluation of <i>in vitro</i> antioxidant activity and metal-binding properties (switchSENSE®) of enzymatic hydrolysates of dromedary and bovine alpha-lactalbumin and total dromedary whey protein
	15:30-15:40	Aziza ZEGHMANE	OP3.3: Camel milk yield and quality: Insights from she-camels in the Laâyoune-Sakia El Hamra region, Morocco
	15:40-15:50	Naziha AYEB	OP3.4: Use of Aloe vera as an alternative feed in dairy cow diets and its effects on milk yield and nutritional quality of milk
	15:50-16:00	Raghia EZZAIAR	OP3.5: Retail practices and preservation methods for camel milk in Laâyoune-Sakia El Hamra, Morocco
	16:00-16:10	Amna CHAHBANI	OP3.6: Effect of volume concentration factor (VCF) on goat skim milk (GSM) during ultra-filtration process (UFP)
	16:10-16:20	Bassem ABU AZIZ	OP3.7: Effects of <i>Boswellia Serrata Resin</i> (BSR) supplementation in milk replacer on growth, health, and immune status of newborn lambs: the methodological approach
16:20-16:30	Discussion & Outcomes		
16:30-16:50	Coffee break		
ROOM 2	THEME III: Quality of animal products		President: Anis ZAIEM
	Rapporteur: Halima ELHATMI		
	16:50-17:00	Raghia EZZAIAR	OP3.8: Microbiological quality of raw camel milk collected along the supply chain (farms-dairies) in Laayoune-Sakia El Hamra region
	17:00-17:10	Amal ZAMMOURI	OP3.9: isolation and selection of exopolysaccharide-producing lactic acid bacteria: from raw milk to industrial applications
	17:10-17:20	Kaouther NEMRI	OP3.10: Impact des huiles essentielles d'orange et de citron sur la stabilité des fromages frais : une approche innovante pour la sécurité alimentaire
	17:20-17:30	Amel SBOUI	OP3.11: <i>Cynara cardunculus</i> flower extract as substitute to rennet for cheese making
	17:30-17:40	Ahmed NEJI	OP3.12: Characterization and antioxidant activity of raw and spontaneously fermented dromedary camel milk
	17:40-17:50	Mohamed AROUA	OP3.13: Next-Gen functional dairy: kefir grain dose effects on donkey and goat milk fermentation
	17:50-18:00	Abir OMRANI	OP3.14: Enhancing fatty acid profiles in camel milk dairy products through incorporation of various carob forms
	18:00-18:10	Narjes HARRAZI	OP3.15: antimicrobial potential of bacillus strains isolated from tunisian soils for food preservation
	18:10-18:20	Samira ARROUM	OP3.16 : Préparation traditionnelle et commerciale du kéfir camelin
	18:20-18:30	Mouna FRIHA	OP3.17: Grazing on halophytic natural pasture produces meat lamb with higher nutritional quality
18:30-18:40	Imen FGUIRI	OP3.18: Physicochemical and microbiological characterization of fermented camel milk (Raieb) and assessment of its shelf life	
18:40-19:00	Discussion & Outcomes		
19:00-19:30	POSTER SESSION THEME I & III		

Day 2: Wednesday, November 05th, 2025

Rapporteur: Ouajdi SOULEM

ROOM 1
08:30-09:10 *Keynote lecture 3 : Pr. Rafika BEN CHAOUACHA-CHEKIR: Les effets de l'action anthropique sur le comportement hydrique, nycthéral et sur l'exploration de la physiologie visuelle du Psammomys obesus*
09:10-09:50 *Keynote lecture 4 : Pr. Manuela RENNA: Insect-derived products: a sustainable alternative to feed farm animals*
09:50-10:20 *Keynote lecture 5 : Pr. Mohamed HAMMADI: La reproduction chez les camélidés: caractéristiques et défis de développement*

Discussion & Outcomes

Coffee break

THEME V: Feed resources

President: Taha NAJAR

Rapporteur: Hadhami HAJJI

ROOM 1
11:00-11:10 **Samira MERADI** **OP5.1:** Palm date waste an efficient alternative feed for livestock: Small ruminant and broiler chickens
11:10-11:20 **Sameh HERZI** **OP5.2:** New concentrate Formulation based on rapeseed meal to minimize or replace soybean meal in dairy cow diets
10:20-11:30 **Kaoutar ABOUKHALID** **OP5.3:** Chemical composition and nutritional quality of pastoral species in Eastern Morocco: comparison of chemical and NIRS approaches
11:30-11:40 **Hamza BOURAS** **OP5.4:** Increase biomass production and salinity tolerance of blue panicum (*Panicum antidotale* Retz.) as an alternative forage in the salt-affected soils of arid regions
11:40-11:50 **Azhar HAJLAOUI** **OP5.5:** Agronomic performance of *Panicum maximum* under arid conditions
11:50-12:00 **Azhar HAJLAOUI** **OP5.6:** Effect of *Panicum maximum* inclusion on growth performance of D'man lambs in arid environments
12:00-12:10 **Aymen MAHMOUD** **OP5.7:** Effect of panicum supplementation on milk production in dairy cows
12:10-12:20 **Halimeh ZOABI** **OP5.8:** Sustainable feeding strategies for Assaf sheep in Palestine: Enhancing reproductive performance using sodium hydroxide-treated almond hulls
12:20-12:30 **Samir TLAHIG** **OP5.9:** Breeding alfalfa for superior forage quality in arid regions through integrated agronomic and molecular approaches

Discussion & Outcomes

Lunch & Break

Day 2: Wednesday, November 05th, 2025

THEME V: Feed resources

President: Touhami KHORCHANI

Rapporteur: Hichem BEN SALEM

ROOM 2
14:30-14:40 **Naziha AYEB** **OP5.10:** Characterization of an alternative fodder resource (Azolla) for the resilience of livestock farming in Tunisia
14:40-14:50 **Hadhami HAJJI** **OP5.11:** Pomegranate peels as additive in concentrate feed: Effects on diet intake, growth and carcass quality of Tunisian local breed goat kids
14:50-15:00 **Hadhami HAJJI** **OP5.12:** Pomegranate peels as additive in concentrate feed; Effects on production and quality milk and cheese yield of Tunisian local goat.
15:00-15:10 **Maïmouna CISSE** **OP5.13:** Reference situation of livestock feed quality control in six Sahel countries (Burkina Faso, Mali, Mauritanie, Niger, Sénégal, Tchad): Strategy for harmonizing quality criteria and compliance with regional trade rules
15:10-15:20 **Samia KDIDI** **OP5.14:** comparison of three DNA extraction methods for microbiota analysis from fecal and rumen samples in goats.
15:20-15:30 **Jamila MSADEK** **OP5.15:** Functional traits responses of *Stipa tenacissima* L. to grazing regimes: implications for forage availability in Mediterranean arid rangelands

Discussion & Outcomes

Coffee break

Day 2: Wednesday, November 05th, 2025

ROOM 2	THEME IV: Management of Wild Animal Species		President: Hatem BEN BELGACEM	Rapporteur: Jamel TAHRI
	11:00-11:10	Carlos I. PASTRANA	OP4.1: Biodiversity patterns around camel breeding zones: A spatial assessment in the Canary Islands	
	11:10-11:20	Aquila ABDELLI	OP4.2: The state of animal diversity and trends of wildlife communities in the northeastern part of Libya	
	11:20-11:30	Yemna KARSSENE	OP4.3: Assessing the dynamic of animal diversity under anthropogenic factors in Tunisia	
	11:30-11:40	Fatma BELANI	OP4.4: Wintering latitude shapes spring migration timing of Trans-Saharan Passerines at a Key North African Stopover Site	
	11:40-11:50	Abdelhakim BOUZID	OP4.5: Effects of climate change on waterbirds phenology and distribution in Algerian Sahara: A decades of observations	
	11:50-12:00	Hafidha TRABELSI	OP4.6: Differential effects of passage through avian and mammalian guts on <i>Juniperus phoenicea</i> L. seed dormancy	
	12:00-12:10	Ayda GHANDRI	OP4.7: Présence et impacts du sanglier (<i>Sus scrofa</i>) dans les agroécosystèmes oasiens du Sud Tunisien	
12:10-12:30	Discussion & Outcomes			

13:00-14:30 **Lunch & Break**

Day 2: Wednesday, November 05th, 2025

ROOM 1	THEME IV: Management of Wild Animal Species		President: Rafika BEN CHAOUACHA-CHEKIR	Rapporteur: Sahbi BEN-DHIAF
	14:30-14:50	Marie PETRETTO	<i>Mini Lecture 1: Quarante ans de conservation dans le sud tunisien : nés pour être sauvages ?</i>	
	14:50-15:00	Marouane LOUHICHI	OP4.8: Assessing the diets of reintroduced Scimitar-Horned Oryx and native Dorcas Gazelle in an arid Tunisian ecosystem through faecal marker methods	
	15:00-15:10	Ahmed EDDINE	OP4.9: The African golden wolf's eco-ethology and its persecution in Northern Algeria	
	15:10-15:20	Yousra ZEMZEMI	OP4.10: Effects of human activities on canids distribution in southern Tunisia	
	15:20-15:30	Abir ZAYED	OP4.11: Modeling of the spatial distribution of <i>Ctenodactylus gundi</i> at macro and microhabitat scales.	
	15:30-15:40	Oifa TABEL HMIDI	OP4.12: Current and future habitat suitability of sympatric Muridae Species (<i>Psammomys sp.</i> and <i>Meriones sp.</i>) in Tunisia in response to climate change	
	15:40-15:50	Mohamed SANUSSI SALH SANUSSI	OP4.13: An ecological study of the porcupine (<i>Hystrix cristata</i> L.) in some areas of the EL-Jabal EL-Akhdar, Libya.	
15:50-16:10	Discussion & Outcomes			

16:30-17:00 **Coffee break**

ROOM 1	17:00-17:10	Oumayma CHHOUMI	OP4.14: Aggressive behavior and head size dimorphism in the Spotted fringe-fingered lizard (<i>Acanthodactylus maculatus</i>)	
	17:10-17:20	Hichem KACEM	OP4.15: Ultrastructural characterization of sperm in Telorchiiidae (<i>Digenea, Plagiorchioidea</i>): First insights from <i>Telorchis attenuatus</i> , a parasite of <i>Trachemys scripta elegans</i>	
	17:20-17:30	Hussein MJAWER	OP4.16: Impact of burrowing and foraging activities of mole rats (<i>Spalax ehrenbergi</i>) on soil characteristics in the Benghazi plain, Libya	
	17:30-17:40	Karama ETISS	OP4.17: Rodent impacts on olive agroecosystems in Southeastern Tunisia	
	17:40-18:00	Discussion & Outcomes		

Day 2: Wednesday, November 05th, 2025

ROOM 3	THEME II: Reproduction, Performance & Genetic Improvement		President: Sghaier NAJARI	Rapporteur: Mohamed Habib YAHYAOUI
	11:00-11:10	Btissam HILAL	OP 2.1: Phenotypic characterization of sheep population in the North of Morocco	
	11:10-11:20	Khaoula EI AMRANI	OP 2.2: Morphometric characterization of southern Moroccan goats	
	11:20-11:30	Khaoula EI AMRANI	OP 2.3: Genetic affinities and maternal lineage of the Hassania goat in southern Morocco: tracing ancestry to the Majorera breed of the Canary Islands	
	11:30-11:40	Ahlem ATOUI	OP 2.4: Heat stress and growth in Tunisian local goat kids: toward resilient breeding strategies in arid environments	
	11:40-11:50	Samia KDIDI	OP 2.5: Inferring genetic diversity and population structure of north African goats from genome-wide SNP data	
	11:50-12:00	Echraak BOUBAKER	OP 2.6: Diversité Génétique du Complexe Majeur d’Histocompatibilité (CMH) chez la population caméline Tunisienne	
	12:00-12:10	Samia KDIDI	OP 2.7: Rumetrics and Lactometrics: two digital applications for livestock data management, genetic improvement, and high-quality milk production in developing countries	
12:50-13:00	<i>Discussion & Outcomes</i>			

13:00-14:30	Lunch			
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ROOM 3	THEME II: Reproduction, Performance & Genetic Improvement		President: Mondher BEN SALEM	Rapporteur: Mohamed HAMMADI
	14:30-14:40	Wijden NIAMA	OP 2.8: Reproductive modulation in ewes using aqueous extract of <i>Scabiosa Atropurpurea</i> : A phytogetic alternative to hormonal treatments	
	14:40-14:50	Hela DERBALI	OP 2.9: Impact of freezing dilutor supplementation with aqueous extract of <i>Marrubium vulgare</i> on sperm quality, oxidative state and in vitro fertility of ram’s spermatozoa during cryopreservation	
	14:50-15:00	Samia BEN SAÏD	OP 2.10: Improved sexual behavior and hormonal levels in rams under environmental heat stress following aqueous extract of <i>Scabiosa Atropurpurea</i> supplementation	
	15:00-15:10	Oumayma CHEFFI	OP 2.11: Stratégies de reproduction durables en zones arides : amélioration du système accéléré 3/2 chez la brebis D’man et la chèvre Drâa	
	15:10-15:20	Lamia DOGHBRI	OP 2.12: Identification and localization of MT1 and MT2 melatonin receptors in dromedary camel (<i>Camelus dromedarius</i>) spermatozoa	
	15:20-15:40	<i>Discussion & Outcomes</i>		

18:00-19:00	<i>POSTER SESSION THEMES II, IV, & V</i>			
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Day 3: Thursday, November 06th, 2025

08:30-09:10 <i>Keynote lecture 6: Dorsaf SEBAI: AI Solutions for Sustainable Animal Farming and Welfare</i>				
ROOM 1	THEME VI: Precision Technology & Socio Economic Aspects		President: Dorsaf SEBAI	Rapporteur: Moufida ATIGUI
	09:10-09:30	Ali BEN ABBES	<i>Mini Lecture 1 : L’intelligence Artificielle (IA) au service de développement durable</i>	
	09:30-09:40	Youssef CHEBLI	OP6.1: Characterizing the grazing behavior of goats through Precision Livestock Technologies in Northern Morocco	
	09:40-09:50	Chayma CHAOUCH AOUN	OP6. 2: Deep learning-based monitoring of dairy camel behavior using a customized wearable sensor system	
	09:50-10:00	Mohamed BOUABID	OP6.3: AI-Driven approaches for resilient and sustainable livestock systems in arid regions	
	10:00-10:10	<i>Discussion & Outcomes</i>		
10:10-10:40	Coffee break			

THEME VI: Precision Technology & Socio Economic Aspects		President: Mongi SGHAIER	Rapporteur: Salah ZENKHRI
ROOM I	10:40-11:00	Hakim SNOUSSI	<i>Mini Lecture 2 : Le camelin en Algérie: Mirage ou virage d'élevage ?</i>
	11:00-11:10	Aissa BENHAMIDA	OP6.4: Impact des variations climatiques sur les systèmes d'élevage ovin en zone steppique: étude comparative Nord–Sud de Djelfa - Algérie.
	11:10-10:20	Doubangolo COULIBALY	OP6.5: Analyse comparative des performances et des paramètres physiologiques du camelin de trait et des bœufs de labour utilisés pour les travaux agricoles dans les systèmes agropastoraux à Bankass et Koro au Mali
	11:20-11:30	Mahmoud YUCEF	OP6.6: La durabilité des parcours et les problèmes rencontrés dans l'élevage pastoral Steppique et Saharien en Algérie
	11:30-11:40	Aicha LAROUCI	OP6.7: Toward a functional typology of pastoral livestock systems in southern Tunisia
	11:40-11:50	Mohamed AROUA	OP6.8: Mediterranean donkey farming: current challenges, farm typologies, and prospects for sustainability
	11:50-12:00	Abdul Razak KAKAR	OP6.9: The camel indigenous livestock for food security and sustainability in arid MINA regions
	12:00-12:15	<i>Discussion & Outcomes</i>	
	12:15-13:00	General discussion & closure	
13:00-14:30	Lunch		



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