



AFRAQ 2024

November 19-22
Hammamet, Tunisia

medina
HOTELS & RESORTS

“Blue Farming: New Horizons for Economic Growth”

3rd Annual International Conference & Exposition
of the African Chapter of the World Aquaculture Society

www.was.org

Organized By

**WORLD
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Conference Venue

Tunisia is the northernmost country in Africa and part of the Maghreb region of North Africa. It is bordered by Algeria to the west and southwest, Libya to the southeast, and the Mediterranean Sea to the north and east. Known for its tourism, Tunisia offers countless attractions, including archeological sites (dating back to the 9th Century BC). Its 1,300 km coastline along the Mediterranean boasts countless pristine, sunny and sandy beaches and resorts. The Southern part of the country features the Sahara Desert landscape.

The Conference will take place at the beautiful coastal town of Hammamet at Medina Hotels & Resorts /Medina Mediterranea. The venue is a uniquely modern leisure centre with stunning attractions providing unforgettable experiences! The Medina exhibition centre is one of the largest convention centres in Tunisia. It has a 6000m² surface area comprising three modular halls decorated in a Tunisian Roman villa style. The Medina congress centre offers a wide range of rooms with state-of-the-art audio-visual equipment. Visit: <https://afraq24.com/hotels>

The conference offers a great opportunity for aquaculture researchers, practitioners, decision makers and other stakeholders to meet, network and discuss all aspects of aquaculture in Africa. Exhibitors from all over the globe are expected to exhibit their products in the state-of-the-art exhibition Center. Participants will also have the opportunity to explore some famous touristic attractions in Hammamet and countrywide. Special excursionary or aquaculture tours will also be arranged to nearby marine fish farms (both large, medium and small scale); aquafeeds facilities, fish markets and some aquaculture R&D centres. Be sure to schedule time for this unique scientific, business and social event!

AFRAQ24 Programme Themes

AFRAQ24 technical program will aim to cover developmental issues including latest research and developmental aspects on aquaculture in Africa. The thematic plenary and technical parallel sessions will comprise submitted oral and poster presentations in English, French, Portuguese and Arabic. AFRAQ24 will feature an international trade exhibition, industry forums, student sessions and activities, satellite workshops (and training sessions) and various meetings/forums on aquaculture development in Tunisia and Africa. The international conference will be centered around the theme "Blue Farming: New Horizons for Economic Growth", and will feature lessons learnt from Tunisia and other countries on the role sustainable aquaculture continues to play in building sustainable food systems for economic growth.

Sample topics will include: (This is an initial theme list, subject to change)

- Aquaculture Investment and Financing
- Aquaculture & the Blue Economy
- Feed, Nutrition & Physiology
- Species, Genetics & Reproduction
- Aquatic Animal Health, Welfare & Biosecurity
- Environmental Management
- Sustainability , Livelihood & Nutritional Security
- Processing and Value Addition
- Food Quality & Safety
- Aquaculture Marketing
- Gender and Youth Development
- Aquaculture Engineering
- Freshwater Aquaculture
- Brackishwater Aquaculture
- Mariculture
- Ornamental Fish Culture
- New/Innovative Systems and Practices
- Aquaculture Certification & Standards
- Country Case Studies
- Aquaculture Networks & Associations
- Aquaculture Governance
- Other Special Topics

Possible special sessions relevant to aquaculture development in Africa will be included and announced in due course

Details regarding online submissions of abstracts (including full guidelines for abstract preparation and an abstract sample will be available soon on:

www.was.org

CALL FOR PAPERS - SUBMIT YOUR PAPERS NOW!

DEADLINE: 15 October 2024

AFRAQ24 encourages the submission of high quality oral and poster presentations. We strongly encourage authors to consider poster presentations because poster sessions will be an integral part of the program. Papers submitted for “oral presentation only” may not be accepted as oral presentations due to the limited number of available time slots. English is strongly encouraged, but three other official languages (French, Portuguese and Arabic) are accepted. **PowerPoint Presentations/Slides are strongly encouraged in English for everyone to follow through.**

Each oral presenter shall be entitled to no more than 20 minutes comprised of 15 minutes for a presentation, plus 5 minutes for questions. Authors of studies involving proprietary products or formulations should present this information in workshops or the trade show. Oral presentations can only use PowerPoint. Overhead projectors, slides and video players will not be available or allowed.

All presenters are required to pay their own registration, accommodation and travel expenses. AFRAQ24 cannot subsidize registration fees, travel or hotel costs.

INSTRUCTIONS FOR PREPARATION OF ABSTRACTS

Extended Abstract Format – Please refer to the sample.

- TITLE OF PAPER :** The paper title is printed in CAPITAL LETTERS, with the exception of scientific names which should be Upper/lower case and italicized. Scientific names should not be preceded or followed by commas or parentheses or other markings.
- AUTHOR(S) :** The first name should be the presenting author. Use *after the presenting author. Type in upper/lower case.
- ADDRESS AND EMAIL :** Type only the presenting author's institution, address and email. Type in upper/lower case.
- MAXIMUM LENGTH :** One Page
- PAGE SIZE :** Standard 210mm x 297mm A4 paper (portrait)
- MARGINS :** 1-inch margin throughout(left/right/top/bottom)
- SPACING :** Single spaced
- PARAGRAPHS :** Paragraphs should be separated by a blank line and should not be indented.
- FONTS :** Character fonts should be 12 point type.
- FIGURES & TABLES :** Figures and tables are highly recommended. They should be reduced to the appropriate size for a one page abstract and should be clearly readable at the reduced size in black print only. The reduced figures and tables should be included in the abstract in camera-ready form.
- MEASUREMENTS :** Use metric units of measurement. When needed, English equivalents may be given in parentheses.

1 inch margin

EVALUATION OF JUVENILE AUSTRALIAN RED CLAW CRAYFISH (*Decapoda quadricarinata*) FED PRACTICAL DIETS WITH AND WITHOUT SUPPLEMENTAL LECITHIN AND/OR CHOLESTEROL

Laura A. Marzini*, Kenneth R. Thompson, Tracy Christian, Carl D. Webster, Luke Manosimos, and David B. Rouse

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Frankfort, KY 40601
lmarzini@ksu.edu

Red claw crayfish (*Decapoda quadricarinata*) are one of more than a hundred species of crayfish found in freshwater ecosystems. However, because of its rapid growth rate, ease of spawning, wide temperature tolerance, and lack of a larval stage, red claw may be the best candidate for aquaculture. Red claw are only being investigated as an aquaculture species in the United States. Red claw are highly dependent on their nutritional requirements and practical diet formulations. No dietary studies on crayfish have been conducted to determine their nutritional requirements. Lecithin and cholesterol are very expensive. Since diet costs can be as much as 70% of the total cost of an aquaculture enterprise, it is imperative that the least expensive diet be formulated. The present study was conducted to determine if cholesterol and lecithin needs to be added to a practical diet for red claw crayfish.

An 8-week feeding trial was conducted in a recirculating aquaculture system with seven 200-liter juvenile red claw crayfish, each stocked at 10 fish per 200-liter tank. Individual tanks were housed within fibreglass tanks, each containing aeration system, water filter, and mechanical filter. Water temperature was maintained at 22-24°C and lighting was provided 12 hours per day. A 12-hour photoperiod cycle was used. Ammonia, nitrite, nitrate, pH, water hardness, alkalinity, chloramines, and dissolved oxygen were monitored three times per week. The growth performance of juvenile red claw was determined by final weight, percentage weight gain, and specific growth rate (SGR) compared to crayfish fed all other diets (Table 2). These results indicate that a practical diet containing 2% cod liver oil and 1% lecithin and having no lecithin appears to be sufficient and that lecithin may not be necessary for juvenile red claw diets.

1 inch margin

8.5 inches wide

1 inch margin
11 inch top
8 inch bottom

Ingredient	Diet			
	1	2	3	4
Mashed Fish	25.0	25.0	22.0	20.0
Soybean Meal	33.0	35.0	35.0	44.5
Lecithin	0.0	0.5	0.0	0.0
Cholesterol	1.0	1.0	0.0	0.0
Other	38.5	39.0	39.5	39.5

Parameter	Diet			
	1	2	3	4
Final weight(g)	0.975	0.020	3.650	5.110
Weight gain (%)	2344	28970	17170	24240
SGR (Day ⁻¹)	2.760	5.650	0.820	2.410
Survival (%)	76.0	64.0	58.0	88.0

PLEASE SUBMIT YOUR ABSTRACT ONLINE

Submit abstracts via the internet at the meeting website : www.was.org. Follow the complete instructions on the online submission.

If you are unable to submit your abstract online, contact the Conference Manager for alternative methods at : worldaqua@was.org or Fax: +1-760-751-5003



AFRAQ2024

November 19-22, 2024

Register online at: www.was.org

Return address for international payments in USD:
 Conference Manager
 P.O. Box 2302
 Valley Center, CA 92082 USA
 Tel: +1 760 751 5005
 Fax: +1 760 751 5003
 Email: worldaqua@was.org

Online registration is preferred at www.was.org OR fax or mail both sides with payment. Use one form per person.

PLEASE PRINT CLEARLY OR TYPE ALL REQUESTED INFORMATION

BADGE INFORMATION: (As you want your name badge to read – No titles, please)

First Name _____ SURNAME (FAMILY NAME) _____
 Company or Institution _____
 (Limited to 40 Letters & Spaces)
 City _____ State/Prov _____ Country _____

MAILING INFORMATION: Email _____
 (please include email address)
 Postal Address _____
 City _____ State / Prov _____ Postal Code _____ Country _____
 Phone _____ Fax _____ Title: (circle one) Dr. Mr. Ms. Mrs.
 (Include country and city code) (Include country and city code)

REGISTRATION FEES: In order to receive the discount rates as listed below, this form and payment must be received by the date listed. See brochure for what is included in registration fees.

TYPE OF REGISTRATION	Register by 10 Oct. 2024	Register after 10 Oct. 2024	
FULL CONFERENCE & TRADE SHOW In order to receive the Pre-Registration discount rate, this form and payment must be received by the date above			* To qualify for Member Rate you <u>must</u> complete the Association Memberships section on the reverse side. ● ● ● ● ● ● ● ● Trade Show is <u>included</u> in the Full Conference Registration Rate. TOTAL REGISTRATION FEE US\$ _____
AFRICAN NATIONALS MEMBER RATE*	<input type="checkbox"/> US\$ 325	<input type="checkbox"/> US\$ 490	
STUDENT MEMBER RATE*	<input type="checkbox"/> US\$ 165	<input type="checkbox"/> US\$ 195	
Non-Member Rate	<input type="checkbox"/> US\$ 425	<input type="checkbox"/> US\$ 590	
Student Non-Member Rate	<input type="checkbox"/> US\$ 215	<input type="checkbox"/> US\$ 255	
NON-AFRICAN NATIONALS MEMBER RATE*	<input type="checkbox"/> US\$ 395	<input type="checkbox"/> US\$ 490	
STUDENT MEMBER RATE*	<input type="checkbox"/> US\$ 165	<input type="checkbox"/> US\$ 195	
Non-Member Rate	<input type="checkbox"/> US\$ 495	<input type="checkbox"/> US\$ 590	
Student Non-Member Rate	<input type="checkbox"/> US\$ 215	<input type="checkbox"/> US\$ 255	
TRADE SHOW PASS (Trade show pass is included with the Full Conference Registration) Good for 3 days admission to exhibits only – November 19-22, 2024 <input type="checkbox"/> US\$ 30 TOTAL TRADE SHOW PASS US\$ _____			
INDUSTRY TOURS – Details to come TOTAL INDUSTRY TOURS US\$ _____			
MEMBERSHIP DUES – Enter amount from Membership Application on other side if applicable. TOTAL MEMBERSHIP DUES US\$ _____			
Do not mail registration after Nov. 1, 2024 or fax after Nov. 1, 2024 After Nov. 1, 2024, bring this form with you to register at the show. Please register online.			➔ TOTAL AMOUNT US\$ _____

Registration Confirmation and Receipt will be emailed after processing.

CANCELLATION POLICY: Cancellation of registration must be received - in writing - no later than September 30, 2024. Refunds for registration fees will be subject to a 20% handling fee. Refunds are processed after the conference. No refund will be made for cancellations received after September 30, 2024 or for "no shows". After September 30, 2024, no refunds will be made for professional or personal emergencies, flight cancellations, denied visa, weather related cancellation or other travel emergencies. Fees for memberships are non-refundable.

PAYMENT METHOD: All fees must be paid to the order of AFRAQ2024.

For bank transfer details, contact us.

Check # _____
 Visa
 Mastercard
 American Express
 Discover
 Diners Club
 Card # _____ Expiration Date _____ Sec Code _____
 Name on Card _____ Date _____ Signature _____
 Credit Card Billing Address _____

REGISTRATION FORM - SIDE 2

Name _____

ASSOCIATION MEMBERSHIPS: Please check all boxes for associations for which you are a current member. Membership in any of those associations qualifies you for the Member Rate* on the Registration Fees. You can join an association at any time before registering to qualify for the Member Rate.

MEMBERSHIPS: WAS USAS APC Korean LACC African Chapter

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AFFILIATE MEMBERSHIPS:

- Aquaculture Association of Canada
- Aquaculture Association of Southern Africa
- Egyptian Aquaculture Society
- European Aquaculture Society
- Global Aquaculture Alliance

MEMBERSHIP APPLICATIONS NEW APPLICATION RENEWAL

WORLD AQUACULTURE SOCIETY (WAS) APPLICATION www.was.org

For details on the different types of memberships and options, please contact the WAS home office at

Tel: +1-225-347-5408 Fax: +1-225-347-5408 Email: judya@was.org

MEMBERSHIP CATEGORY: (Indicate only one)

- Individual** (USD 45/yr) Applies to an individual from Africa
- Individual** (USD 90/yr) Applies to an individual only
- Full Student** (USD 45/yr) Has all benefits and rights of regular membership including voting for all candidates on the ballot (Copy of Student ID or Signature of Professor required)
- Comp Student** (No charge) Has all benefits of regular membership but voting only allowed is for the Student Director and not for the full ballot. (Copy of Student ID or Signature of Professor required)
- Sustaining** (USD 155/yr) Applies to any one individual from a company
- Corporate** (USD 295/yr) Allows all employees of one company to attend meeting at Member Rate
- Lifetime** (USD 1400 with one chapter) Applies to an individual only

**Discounted rates available for individuals in countries based on World Bank List of Low Income Economies. Must sign-up on website only for this category.

CHAPTER OPTIONS:

*One chapter included in membership.
Mark the chapter you choose.*

- African Chapter**
- Asian Pacific**
- Korea**
- Latin American/Caribbean**
- United States (USAS)**
- None** (deduct USD 5)

You can add extra Chapters for USD 5

Fees for memberships are non-refundable.

Total Amount for WAS Membership USD _____
Please enter this amount under "Membership Dues" section on opposite side of this form.

For membership in other associations, please contact them directly.

Engaging with Industry

The Aquaculture Africa events are all about communication with the sector. AFRAQ24 will feature a special international trade exhibition, where Tunisian and international organizations will present their latest technologies, products and services. Both Standard and Corner booths will be available. Each booth is 6m2 (2x3m) and features walls, carpet, two chairs and one table, spotlights, one power outlet, fascia identification sign and two free passes for the conference. We can provide meeting points for industry associations, organization/industry panels or B2B meetings, farmers forums etc. Organization/industry panel meetings will take place around the trade exhibition, and aquaculture tours will be organized after the Conference.

Platform for Developmental Organizations

AFRAQ24 will also be a meeting hub for developmental agencies, NGOs and institutions in Africa – where they can hold plenary talks, meetings, seminars, investment forums and satellite workshops of African aquaculture projects and activities.

Networking for Students

Special forums and events will be arranged for students attending AFRAQ24 to enable networking and exchange of ideas amongst students and student mentors. The forums/ events will have a dedicated programme that includes a special student reception, student contests/awards. Students receive the full registration package plus the student reception. To qualify for the student rate, a copy of your Student I.D. is required. To learn more on WAS Student Program, visit <https://www.wasstudents.org/>

Farm Tours

Aquaculture tours are being organized at some interesting fisheries and aquaculture facilities around Tunisia which include commercial ventures, projects, R&D centres, fish markets, aquafeeds facilities etc. More details will be made available on conference website.

FULL CONFERENCE REGISTRATION INCLUDES:

- Admission to all sessions (including reception), seminars and the trade show.
- Conference bag and Show Directory
- Refreshment breaks (including lunch)
- Abstract App and/or Abstract Book

* To qualify for Member Rate, you must be a WAS member in good standing

Trade Show Pass only –
Valid whole period: USD30

AFRAQ2024 Tentative Programme Overview

Tuesday, 19 November

Registration Open & Exhibit Set-up	1200 - 1800
Registration & Welcome Drink	1600 - 1800

Wednesday, 20 November

Registration Open	0730 - 1700
Welcome To Tunisia	0900 - 0920
Plenary Sessions	0920 - 1000
Opening Ceremony	1000 - 1020
Official Opening Exhibition	1020
Break	1020 - 1040
Exhibition	1000 - 1800
Lunch	1240 - 1420
Sessions	1420 - 1540
Break	1540 - 1600
Sessions	1600 - 1740
Posters	1000 - 1800

Thursday, 21 November

Registration Open	0730 - 1700
Sessions	0900 - 1040
Break	1040 - 1100
Trade Show	1000 - 1600
Sessions	1100 - 1240
Lunch	1240 - 1420
Sessions	1420 - 1540
Break	1540 - 1600
Sessions	1600 - 1740
Posters	1000 - 1800
WAS AC Business Meeting	1800 - 1900

Friday, 22 November

Registration Open	0800 - 1500
Sessions	0900 - 1040
Break	1040 - 1100
Trade Show	1000 - 1600
Sessions	1100 - 1240
Lunch	1240 - 1420
Sessions	1420 - 1540
Break	1540 - 1600
Sessions	1600 - 1740
Posters	1000 - 1600
Exhibit Move-out	1600 - 1900

AFRAQ2024 Steering Committee and National Organizing Committee

AFRAQ2024 Conference Chairs:

- Dr. Nadia Cherif (INSTM/WAS-AC, TUNISIA)

AFRAQ2024 Steering Committee (SC):

- Prof Hichem ben Salem (IRESA, TUNÍSIA)
- Mr. Chokri Zairi (Ministry of Agriculture)
- Mr. Yassine Skandrani (Ministry of Agriculture)
- Prof Hechmi Missaoui (INSTM, TUNÍSIA)
- Prof. Nevine Abou Shabana (NIOF/WAS AC, EGITO)
- Dr. Sherif Sadek (ACO/WAS AC, EGITO)
- Dr. Bernice Mclean (AUDA-NEPAD, AFRICA DO SUL)
- Prof. Mohamed Hichem Kara (ANNABA UNIV. ARGÉLIA)
- Mr. Youssef Ouati (INFOSAMAK, MARROCOS)
- Ms. Afef Boussadia (ALLER AQUA, TUNÍSIA)

AFRAQ2024 National Organizing Committee (NOC):

- Dr. Cheik Ali Sboui (DGPA)
- Prof. Mohamed Salah Azaza (INSTM)
- Mr. Cherif Touelib (FAO Subregional Office, Tunis)
- Mr. Naoufel Romdhane (DGPA)
- Prof. Mohamed Salah Romdhane (INAT)
- Mr. Foued Mestiri (CTA)
- Mr. Achraf Ben Slimen (GIPP)
- Mrs. Rym Haddaoui (APIA)
- Mrs. Abir Ben Jedou (Groupe of Nakbi)
- Mr. Amor Samet (Federation National Aquaculteurs)
- Mr. Oussama Mdimegh (Groupe Mdimegh)
- Dr. Mehdi Chaka (CRDA)

Tunisian Aquaculture Society

- Mrs. Wiem Sboui (Seaweed farming)
- Mr. Wael Boukoum (AquaCompany: Molluscs farming)
- Mr. Mohamed Arfi (freshwater farming)

Student Representative

- Mrs. Amel Mzoughi (University of Carthage)

AFRAQ2024 Program Co-Chairs:

- Prof. Peter Britz, (Program Manager/Advisor, Rhodes University, SOUTH AFRICA):
- Dr. Judith Makombu (Program Chair, FRENCH: University of Buea, CAMEROON)
- Prof. Nevine Abou Shabana, Program Chair, ARABIC: National Institute of Oceanography & Fisheries, EGYPT



LOCATION



Conference Venue: Medina Conference & Expo Centre
Rue de la Medina 8050; Yasmin, Hammamet

www.medina.com.tn / www.medinaevents.com

<https://afraq24.com/hotels>

TRAVEL

Entry Visas for Tunisia

- A number of African nationals can enter Tunisia visa free for a period of 90 days. The same applies to EU citizens (except Cyprus), USA, China and many other Middle East and Asian countries. To learn more on visa requirements/ eligibility for Tunisia, visit: <https://visaguide.world/africa/tunisia-visa/>
- Ministry of Agriculture (through a competent authority) may assist in the facilitation of visas-on-arrival for participants without a Tunisian Embassy/Consulate or those with difficulties in accessing their visas under normal channels.. However, participants need to register and confirm their participation at least 3 months before the event.
- Details will be uploaded on the Conference website. **It is important to register early in order for the system to capture your details for visa facilitation ahead of time.**

ACCOMODATION OPTIONS

- More details on travel, accommodation and Airport transport are available on the Conference website www.was.org OR visit <https://afraq24.com/hotels/>

AFRAQ2024 Contacts

For more information, please stay in touch with AFRAQ24 Conference Management Team or visit our [website www.was.org](http://www.was.org)

Conference Management

Email: worldaqua@was.org

Web: www.was.org

Trade Show, Exhibition and Sponsorship

Email: mario@marevent.com

Web: www.was.org

African Chapter of the World Aquaculture Society (WAS-AC)

africanchapter@was.org

