

#WE R AQUACULTURE

Montpellier France
August 25-29 2018



#We R Aquaculture

*We are the producers, the investors, the suppliers, the processors, the vendors,
the scientists, the educators, the students and the consumers of farmed aquatic products.*

organized by



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AQUACULTURE
Society

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AQUA 2018 will celebrate the fact that aquaculture is one of the most important food production industries in the world. Aquaculture is the most efficient producer of high quality food and contributes to global health and wealth. Aquaculture respects the environment, creates employment and offers significant investment opportunities. AQUA 2018 will take place from August 25-29 in the beautiful French city of Montpellier and will comprise a scientific conference, trade exhibition, industry forums, workshops, student events and receptions. The event will highlight the latest aquaculture research and innovation to underpin continued growth of this exciting food production sector. The AQUA events are co-organised by the European Aquaculture Society (EAS) and the World Aquaculture Society (WAS) and are held every six years. Past events were held in Nice (2000), Florence (2006) and Prague (2012).

It is a global aquaculture event and participation is expected from more than sixty countries.

MONTPELLIER: A FANTASTIC LOCATION TO BRING THE AQUACULTURE WORLD TOGETHER

Neighboring the Provence area in southern France, Montpellier is the ideal place to stay and take advantage of the seashore and the many hidden treasures of the Languedoc-Roussillon region. Discover 6 major UNESCO World Heritage sites, scenic villages and landscapes and vast natural areas such as the Camargue marshland, and the Cévennes and Pyrénées mountains.

Nestled between sea, vineyards and mountains, Montpellier is the very definition of the Mediterranean city. With its rich historical heritage and idyllic location just a few kilometers from the sea, Montpellier is a key international city for business tourism and is rich with 1,000 years of history. People who cherish old stones and a historical ambiance love strolling through downtown Montpellier's medieval streets, surrounded by historical monuments and antique shops, designer boutiques, and major luxury brand names set up in thousand-year old dwellings with vaulted ceilings... sure to give that far-from-home feeling!

AQUA 2018 WILL HAVE THE LARGEST AQUACULTURE TRADESHOW

AQUA 2018 will draw on Europe and Africa, Canada, USA and Latin America as well as the Middle East and Asia Pacific region and the rest of the world to create one of the largest aquaculture trade shows in the world. The trade show definitely will have one of the widest variety of products of any trade show ever! This is your opportunity to inspect the latest in products and services for the aquaculture industry.



Technical Program Covers The Latest Research

Sessions and workshops at AQUA 2018 will cover all aspects of global aquaculture. We propose the following thematic and species-based topics:

Aquaculture Place in Society

Communication to Society
Socio-economics
Consumer awareness and perception
Consumer concern on animal welfare

Aquaculture Economics

Development, welfare and poverty alleviation
Economics and management
Markets and marketing

Aquaculture, Environment, Biodiversity and Climate Change

Environmental impact of climate change and ocean acidification
Environmental impact of aquaculture: assessment and minimization
Environmental and economic impacts of exotic and GMO species
Genetic impact of aquaculture escapes

Aquaculture standards certification, schemes, costs and benefits

Measuring sustainability in a changing world
Food safety
Social certifications and labor welfare
Integrating finance into sustainability models
Organic aquaculture

Aquaculture and Human Health

Health attributes of seafood
Bioactives and functional seafood
Advances in seafood processing
Drugs and therapeutants

Production Systems

Hatchery technologies
Cage-culture engineering
Bio-floc systems
Recirculation systems
Raceway systems
Emerging production systems for salmonid culture: landbased and semi-contained
Pond culture
Reservoir based aquaculture
Offshore aquaculture
Integrated multi-trophic aquaculture
Capture-based aquaculture
Aquaculture in desert conditions

Feedstuffs, Feeds and Feed additives

Feedstuffs and feed additives
Fish meal and oil extension (IFO)
Alternative feedstuffs and aquafeeds
Antimicrobials in aquafeeds, prebiotics and probiotics
Life feed

Genetics

Selective breeding
Population genetics
Hybridization
Sex determinism and control
Biotechnology

Animal Science, Welfare, Health and Diseases

Morphology
Histology
Embryology
Immunology and pathology
Animal welfare

General culture

Reproduction and broodstock management
Larvae management
Grow-out
Nutrition and feeding strategies, carnivorous finfish feeds
Morphology, physiology and behaviour
Health, environmental and health management, sealice
Restoration projects using aquaculture organisms

Targeted species

Oyster, Mussels, Various bivalves
Carp, Perch, Pangasius, Clarias, Catfish, Tilapia, Eels, Trout, Sturgeons, Barramundi, Grouper & snappers, Tuna, Cobia, Yellowtails, Flatfish, Rabbit fish - siganids
Crayfish, Freshwater prawns, Marine shrimps
Macroalgae, Microalgae (bioenergy and bioproducts)
Ornamentals
Amphibian and reptile
Plankton
Seacucumber, sea urchins, polychaetes

Special Topics

Education, extension, and technology transfer
Aquaculture policy and regulations
Horizon 2020 - EU project updates- Horizon 2020 - The EU Research Programme (including projects on microbial and marine algae feed ingredients, IMTA, selective breeding, research infrastructure....)
EURASTiP - "Promoting Multi-Stakeholder Contributions to International Cooperation on Sustainable Solutions for Aquaculture Development in South-East Asia"



CALL FOR PAPERS

DEADLINE: April 10, 2018

AQUA 2018 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. All abstracts must be in English-the official language of the conference.

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 Power Point.

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.

AQUA 2018 cannot subsidize registration fees, travel or hotel costs.

No Abstract Book will be printed – a USB Abstract Book will be given to registered attendees.

INSTRUCTIONS FOR PREPARATION OF ABSTRACTS

Please refer to full guidelines at <https://www.was.org/EasOnline/abstracts/default.aspx>

- 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 :** 2.5 cm 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.

2.5 cm margin

EVALUATION OF JUVENILE AUSTRALIAN RED CLAW CRAYFISH *Cherax quadricarinatus* FED PRACTICAL DIETS WITH AND WITHOUT SUPPLEMENTAL LECITHIN AND/OR CHOLESTEROL

Laura A. Martin*, Kenneth R. Thompson, Tracy Christian, Carl D. Webster, Lukasz Monemczak, and David B. Reuse

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Kentucky State University
Frankfort, KY 40601
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Red claw crayfish (*Cherax quadricarinatus*) are one of more than a hundred species of aquatic freshwater crayfish. 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 in the United States. Red claw are only being investigated as an aquaculture species in the United States and very little information exists on their nutritional requirements and practical diet formulations. As they expand, more information is required on their nutritional requirements and practical diet formulations. The present study was conducted to determine if cholesterol and lecithin are needed to be added to their diet, these two nutrients are essential for growth and cholesterol is 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 are needed to be added to a practical diet for red claw crayfish.

A 8-week feeding trial was conducted in a recirculating aquaculture system with aerily-bioreacted juvenile red claw weighing 0.2 g red claw, each stocked in 10 20 liter mesh culture units. Individual units were housed within fiberglass tanks, each containing a mechanical filter, water pump, and aeration system. Water temperature was maintained at 27-29°C and lighting was provided on a 12h light/12h dark cycle. Ammonia, nitrite, nitrate, pH, temperature, alkalinity, chlorides, and dissolved oxygen were tested three times per week. The growth performance of juvenile red claw when fed four practical diets with and without cholesterol and lecithin. Other practical diets included methuen fish meal, soybean meal, shrimp meal, wheat flour, vitamin and mineral mix, pellet binder, cod liver oil, and corn oil (Table 1).

After 8 weeks, red claw crayfish fed a practical diet without cholesterol (Diet 3) had significantly ($P < 0.05$) lower 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% corn oil and having no lecithin appears to be sufficient and that lecithin may not be necessary for juvenile red claw diets.

TABLE 1. Formulation of experimental diets fed to red claw crayfish.

	Diet			
	1	2	3	4
Methuen fish	25.0	25.0	22.0	23.0
Soybean meal	35.0	35.0	35.0	44.5
Lecithin	0.5	0.6	0.5	0.0
Cholesterol	1.0	1.0	0.0	0.0
Other	78.5	39.0	39.5	30.5

TABLE 2. Final weight, percentage weight gain, specific growth rate (SGR), and percentage survival of red claw crayfish fed four practical diets. Means in a column with different letters were significantly different ($P < 0.05$)

	Diet			
	1	2	3	4
Final weight (g)	6.97a	6.00a	3.65b	5.11a
Weight gain (%)	338a	287a	177b	245a
SGR (Day ⁻¹)	5.76a	5.66a	4.48b	5.41a
Survival (%)	76.0	64.0	56.0	80.0

2.5 cm margin
21 cm wide

ALL ABSTRACTS AND PRESENTATIONS MUST BE IN ENGLISH

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.



AQUA 2018

August 25-29, 2018

Register online: USA – www.was.org

Return address for 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 in USD OR www.aquaeas.eu in Euros OR fax or mail both sides. 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)

Country _____

MAILING INFORMATION

Email _____ Alternate 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 June 30, 2018	Register by August 1, 2018	Register after August 1, 2018	* 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\$/€ _____
FULL CONFERENCE & TRADE SHOW In order to receive the Pre-Registration discount rate, this form and payment must be received by the date above				
ASSOCIATION MEMBER RATE*	<input type="checkbox"/> US\$475/€ 430	<input type="checkbox"/> US\$575/€ 525	<input type="checkbox"/> US\$675/€ 615	
STUDENT MEMBER RATE* Include copy of Student I.D.	<input type="checkbox"/> US\$195/€ 175	<input type="checkbox"/> US\$245/€ 225	<input type="checkbox"/> US\$295/€ 270	
Non-Member Rate	<input type="checkbox"/> US\$570/€ 520	<input type="checkbox"/> US\$670/€ 610	<input type="checkbox"/> US\$770/€ 700	
Student Non-Member Rate Include copy of Student I.D. You can join WAS on the reverse side and use the Member Rate.	<input type="checkbox"/> US\$265/€ 240	<input type="checkbox"/> US\$300/€ 280	<input type="checkbox"/> US\$355/€ 320	
<input type="checkbox"/> Spouse Rate Name _____	<input type="checkbox"/> US\$325/€ 295	<input type="checkbox"/> US\$425/€ 390	<input type="checkbox"/> US\$525/€ 480	

TRADE SHOW PASS (Trade show pass is included with the Full Conference Registration)
 Good for 3 days admission to exhibits only – August 26, 27, 28 US\$ 30/€ 25 **TOTAL TRADE SHOW PASS** US\$/€ _____

INDUSTRY TOURS – To be announced later.

MEMBERSHIP DUES – Enter amount from Membership Application on other side if applicable. **TOTAL MEMBERSHIP DUES** US\$/€ _____

Do not mail registration after August 1, 2018 or fax after August 5. After August 5, bring this form with you to register at the show.

→ 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 July 15, 2018. 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 July 15, 2018 or for "no shows". After July 15, 2018, 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 AQUA 2018. For bank transfer details, contact us.

Check # _____ Visa Mastercard American Express Discover Diners Club

Card # _____ Expiration Date _____

Name on Card _____ Date _____ Signature _____

Credit Card Billing Address _____

REGISTRATION FORM - SIDE 2

ASSOCIATION MEMBERSHIPS : Please check all boxes for associations of which you are a current member to receive the member rate on the registration fees. You can join an association at any time before registering to qualify for the member rate.

- | | |
|--|---|
| <input type="checkbox"/> European Aquaculture Society | <input type="checkbox"/> Latin American & Caribbean Chapter WAS |
| <input type="checkbox"/> World Aquaculture Society (WAS) | <input type="checkbox"/> US Chapter of WAS (USAS) |
| <input type="checkbox"/> African Chapter WAS | <input type="checkbox"/> International Assn of Aquaculture Economics and Mgmt |
| <input type="checkbox"/> Asian-Pacific Chapter WAS | <input type="checkbox"/> Aquacultural Engineering Society |

MEMBERSHIP APPLICATION

NEW APPLICATION

RENEWAL

Join the EUROPEAN AQUACULTURE SOCIETY (EAS)!



EAS MEMBERSHIP includes automatic receipt of the Aquaculture Europe Magazine and newsletter, online access to Aquaculture International, online networking, annual membership list, reductions on international aquaculture press and websites, as well as **BIG REDUCTIONS ON REGISTRATION** for EAS and WAS co-organized meetings.

EAS membership runs from January to December each year. New members joining at any time of the year receive all material for the calendar year.

EAS Membership Categories

	Standard	Reduced Rate*
<input type="checkbox"/> EAS Individual Membership	€ 97.50	€ 67.50
<input type="checkbox"/> EAS Institutional Membership	€ 307.50	€ 207.50
<input type="checkbox"/> EAS Student Membership	—	€ 60.00
<input type="checkbox"/> EAS Life Membership**	€ 727.50	—

Total Amount for EAS Membership € _____

Please enter this amount under "Membership dues" in the table above.

*Reduced membership fees are available for:

Retired persons (certification of retired status required).

Individuals residing in European and non-European Mediterranean countries with Gross National income (GNI) lower than US\$ 15,000 per capita. These countries are: Albania, Algeria, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Egypt, Hungary, Iran, Iraq, Kazakhstan, Latvia, Lithuania, Macedonia- FYR, Montenegro, Morocco, Poland, Romania, Russian Federation, Serbia, Tunisia, Turkey, Turkmenistan, Ukraine

- Institutes if based in one of the above mentioned countries.

- Students (copy of current student card required).

**Life membership offers the general EAS benefits for full lifetime duration.

Join online at: <http://www.aquaeas.eu>

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: +1-225-578-3137 Fax: +1-225-578-3493 Email: judya@was.org

MEMBERSHIP CATEGORY: (Indicate only one)

- Individual** (Electronic JWAS) (USD 65/yr) Applies to an individual only
- Individual** (Printed JWAS) (USD 85/yr) Applies to an individual only
- Student** (Electronic JWAS) (USD 45/yr) (Copy of Student ID or Signature of Professor required)
- Student** (Printed JWAS) (USD 65/yr) (Copy of Student ID or Signature of Professor required)
- Sustaining** (Electronic JWAS) (USD 105/yr) Applies to any one individual from a company
- Sustaining** (Printed JWAS) (USD 125/yr) Applies to any one individual from a company
- Corporate** (Electronic JWAS) (USD 255/yr) Allows all employees of one company to attend meeting at Member Rate
- Corporate** (Printed JWAS) (USD 275/yr) Allows all employees of one company to attend meeting at Member Rate
- Lifetime** (Electronic JWAS only) (USD 1000 with no chapter) Applies to an individual only
- Lifetime** (Electronic JWAS only) (USD 1100 with one chapter) Applies to an individual only

CHAPTER OPTIONS:

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

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

You can add extra Chapters for USD 5

Total Amount for WAS Membership USD _____

Fees for memberships are non-refundable.

Please enter this amount under "Membership Dues" section on opposite side of this form.

*For membership in other associations, please contact them directly.
If you need a phone number, contact the Conference Manager (+1-760-751-5005).*

INDUSTRY FORUMS & FARM TOURS

INDUSTRY FORUMS

Special industry oriented sessions will be organized on the Monday and Tuesday to address industry challenges and discuss ways to overcome these. More information will be provided on the AQUA 2018 website.

SPECIAL HOTEL RATES

Special hotel rates have been arranged for your visit to France. Please visit the website to get details on the hotels and how to reserve your room.

FARM TOURS

There will be several Farm tours arranged by the French Aquaculture Industry.



TRADE SHOW SCHEDULE		
AUGUST 2018		
SUNDAY 26 EXHIBITS OPEN 10:30 - 18:00	MONDAY 27 EXHIBITS OPEN 10:30 - 17:00	TUESDAY 28 EXHIBITS OPEN 10:30 - 16:00

For Trade Show information, contact: Mario Stael mario@marevent.com

YOUR FULL CONFERENCE REGISTRATION INCLUDES:

- Admission to all sessions, seminars and the trade show.
- Admission to the Receptions.
- Conference bag and Show Directory (except for spouse).
- Refreshment Breaks and Cash Bar Happy Hour.
- 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.
- Only pre-registered attendees are guaranteed materials.

FOR MORE INFORMATION:

AQUA 2018 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 • www.was.org • www.aquaeas.eu

REGISTER EARLY AND \$AVE!

TENTATIVE SCHEDULE

Thursday, August 23

WAS Board Meeting.....0900 - 1700

Friday, August 24

WAS Board Meeting.....0900 - 1700
EAS and WAS Board Dinner.....

Saturday, August 25

Registration Open & Exhibit Set-up.....1000 - 1700
EAS Board Meeting0900 - 1030
WAS Business Meeting1600 - 1700
Opening (5 speakers at 5 min each).....1800 - 1900
Welcome Drink.....1900 - 2100

Sunday, August 26

Registration Open.....0730 - 1700
EAS & WAS Remarks (awards).....0900 - 0930
Plenary Sessions.....0930 - 1030
Spotlight Awards1030 - 1045
Break1045 - 1120
Trade Show Open.....1000 - 1800
Sessions1120 - 1240
Lunch (at individual expense).....1240 - 1430
Sessions1430 - 1710
Happy Hour & Posters1710 - 1800
Student Reception.....1900 - 2100

Monday, August 27

Registration Open.....0800 - 1700
Sessions0900 - 1040
Break1040 - 1110
Trade Show Open.....1030 - 1700
Sessions1110 - 1250
Lunch (at individual expense)1250 - 1430
Sessions1430 - 1710
Happy Hour & Posters1710 - 1800
EAS General Assembly.....1710 - 1830

Tuesday, August 28

Registration Open.....0800 - 1600
Sessions0900 - 1040
Break1040 - 1110
Trade Show Open.....1030 - 1600
Sessions1110 - 1230
Lunch (at individual expense).....1230 - 1400
Sessions1400 - 1520
Break1520 - 1540
Sessions1540 - 1720
Exhibit Move-out.....1540 - 1900
President's Reception1900 - 2200

Wednesday, August 29

Registration Open.....0800 - 1500
Sessions0900 - 1040
Break1040 - 1110
Sessions1110 - 1230
Lunch (at individual expense).....1230 - 1400
Sessions1400 - 1540
Break1540 - 1600
Sessions1600 - 1720
Closing Happy Hour.....1730 - 1830

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