

The presentations will be mainly in Spanish

LAQUA 20

Latin American & Caribbean Aquaculture 2020
and XXI Congreso Ecuatoriano de Acuicultura



Slogan To
Come

September 7-10, 2020

HOTEL HILTON COLON
Guayaquil, Ecuador

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The annual meeting of

WORLD
AQUACULTURE
Society

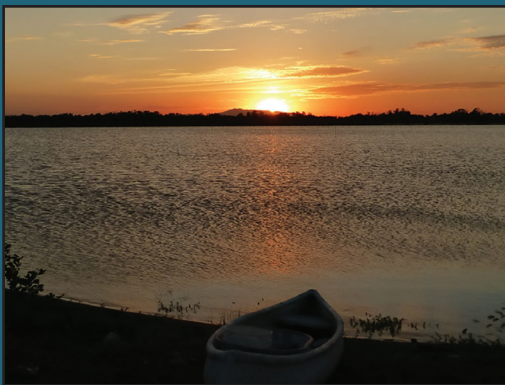


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LACQUA20 will be the 2020 Annual meeting of the Latin American & Caribbean Chapter of WAS. Following upon the previous successful LACQUA meetings, LACQUA20 will bring international attention to the aquaculture industry of Ecuador as it will be held along with the XXI Congreso Ecuatoriano de Acuicultura.

LACQUA20 will take place in Guayaquil, Ecuador. It is the second biggest city in the country. Ecuador's aquaculture is characterized by shrimp crops, being the largest shrimp exporter in the continent. Other species found in the country are tilapia, in the Andean region, trout and in the Amazon region, Cachama, Sabalo and Paiche.

BEYOND THE CONFERENCE

The conference will be held in three languages for spoken and written materials. The conference will include all major aquatic species cultured in Ecuador and the other LACC countries with a special focus on new technologies, environment, and other specific topics.

INTERNATIONAL EXHIBITION

There will be an exhibition of aquaculture suppliers from around the world displaying the latest in equipment, supplies and services. As well as national entities.

TRADE SHOW SCHEDULE		
TUESDAY	WEDNESDAY	THURSDAY
SEPT	SEPT	SEPT
8	9	10

Keep in contact with the program developments for

LACQUA 20

**Latin American & Caribbean
Aquaculture 2020**

www.was.org

TECHNICAL PROGRAM COVERS THE LATEST RESEARCH

Sessions and workshops at LACQUA20 will cover all aspects of aquaculture in Ecuador, as well as the rest of the world. Sample topics will include:

Fish Culture

Tilapia
Marine fish
Ornamental fish
Other native fish

Crustaceans Culture

Shrimp culture

Other Species

Seaweeds and algae
Molluscs
Echinoderms
Plankton

Production Systems

Biofloc systems
Recirculation systems - RAS
Aquaponic systems

Sustainable Aquaculture

Standards and certification
Aquaculture and the environment
Mariculture and the environment
Integrated multi-trophic aquaculture
Water quality management

New Technologies

Health and Diseases

Immunology
Toxicology
Fish health
Shrimp health
Probiotics and prebiotics

Physiology and Genetics

Fish physiology and genetics
Shrimp genetics
Salmon genetics

Nutrition and Feeding

Fishmeal and fish oil
Alternative ingredients
Shrimp feed
Climate changes and fisheries
Finfish nutritional needs
Larval feeding
Feeding strategies - automation

Processing and Economics

Processing technologies
Aquaculture socio-economics

Education and Aquaculture Careers

Student exchanges

YOUR FULL CONFERENCE REGISTRATION INCLUDES

- Only pre-registered attendees are guaranteed materials
- **Admission to all sessions, seminars and the trade show.**
- Admission to the Receptions.
- Conference bag and Show Directory
- 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.

Farmer's Day and Industry Sessions

There will be a special Farmers Day with presentations on topics especially of interest to aquaculture farmers. There will also be Industry Sessions throughout the conference with speakers addressing industry concerns.

**REGISTER EARLY
AND \$AVE!**

FOR MORE INFORMATION:

LACQUA20
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
Carolina Amézquita
carolina@was.org

REGÍSTRATE CON TIEMPO Y AHORRE!

CALL FOR PAPERS- DEADLINE: June 1, 2020

LACQUA20 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 encouraged, but 3 official languages (English/Portuguese/Spanish) accepted. Power Point Presentation – Slides - same as above – English strongly encouraged. Oral Presentation: any of the 3 official languages. At the conference, the abstracts may be presented in English, Spanish or Portuguese. Title the same language as presentation.

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. LACQUA20 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 quadricarinatus*) FED PRACTICAL DIETS WITH AND WITHOUT SUPPLEMENTAL LECITHIN AND/OR CHOLESTEROL.

Laura A. Morzanic*, Kenneth R. Thompson, Tracy Christian, Carl D. Webster, Lukasz Monemusz, and David R. Rouse

Agriculture Research Center
Kentucky State University
Frankfort, KY 40601
l.morzanic@kysu.edu

Red claw crayfish (*Decapoda quadricarinatus*) are one of more than a hundred Australian freshwater crayfish. However, because of its rapid growth rate, ease of spawning, wide geographic distribution, 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. Information exists on their nutritional requirements and practical diet formulations. No information exists on the requirements for lecitin and cholesterol in their diet. These two nutrients are expensive, and lecitin 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 lecitin needs to be added to a practical diet for red claw crayfish.

An 8-week feeding trial was conducted in a recirculating water system with newly-hatched juvenile (100 mg weight) of red claw crayfish in static mesh culture units. Individual units within fibreglass tanks, each containing a water line, water was recirculated through mechanical filters, water heaters, and a 27.2°C and lighting was provided by fluorescent cycling light tubes. Ammonia, nitrite, nitrate, pH, and temperature, alkalinity, chlorophyll *a*, and dissolved oxygen were monitored daily. The purpose of the trial was to examine the effects of growth performance of newly hatched juvenile red claw when fed four practical diets with or without cholesterol and lecitin. Other practical diets included menhaden 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 and lecitin 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 lecitin may be sufficient and that lecitin may not be necessary for juvenile red claw diets.

1 inch margin

8.5 inches wide

1 inch margin
11 inches long

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

Diet	Diet			
	1	2	3	4
Menhaden FM	25.0	25.0	25.0	25.0
Soybean Meal	35.0	35.0	35.0	44.5
Lectin	0.0	0.5	0.0	0.0
Cholesterol	1.0	1.0	0.0	0.0
Other	28.5	29.0	29.5	26.5

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	Diet			
	1	2	3	4
Final weight (g)	6.97a	4.02a	3.56b	3.11a
Weight gain (%)	336a	287a	177b	240a
SGR (day ⁻¹)	1.74a	1.06a	0.88b	1.41a
Survival (%)	76.0	64.0	56.0	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 : worldaqna@was.org or Fax: +1-760-751-5003



LACQUA20

September 7-10, 2020

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 August 1, 2020	Register after August 1, 2020	
RULL 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\$ _____
ASSOCIATION MEMBER RATE*	<input type="checkbox"/> US\$ 275	<input type="checkbox"/> US\$ 375	
STUDENT MEMBER RATE* Include copy of Student I.D.	<input type="checkbox"/> US\$ 95	<input type="checkbox"/> US\$ 135	
Non-Member Rate	<input type="checkbox"/> US\$ 370	<input type="checkbox"/> US\$ 470	
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\$ 145	<input type="checkbox"/> US\$ 180	
<input type="checkbox"/> Spouse Rate Name _____	<input type="checkbox"/> US\$ 225	<input type="checkbox"/> US\$ 295	

TRADE SHOW PASS (Trade show pass is included with the Full Conference Registration)
 Good for 3 days admission to exhibits only – September 8-10, 2020 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 August 1, 2020 or fax after August 1, 2020. After August 1, 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 August 1, 2020. 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 August 1, 2020 or for “no shows”. After August 1, 2020, 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 LACQUA20. 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

AFFILIATE

MEMBERSHIPS:

- AQUABIO
- Aquaculture Association of Canada
- Aquaculture Association of South Africa
- Aquaculture Without Frontiers
- Asian Fisheries Society
- Associação Cearense de Aquicultores – ACEAQ
- China Society of Fisheries
- Egyptian Aquaculture Society
- European Aquaculture Society
- Global Aquaculture Alliance
- IAFI The International Association of Seafood Professionals
- Indonesian Aquaculture Society
- Korean Aquaculture Society
- Korean Society of Fisheries and Sciences (KOSFAS)
- Malaysian Fisheries Society
- Society of Aquaculture Professionals (India)
- South African Aquaculture Society
- Spanish Aquaculture Association (SEA)

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** (Electronic JWAS) (USD 65/yr) Applies to an individual only
- Individual** (Printed JWAS) (USD 110/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 90/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 150/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 300/yr) Allows all employees of one company to attend meeting at Member Rate
- Lifetime** (Electronic JWAS only) (USD 1005/yr) 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

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.
If you need a phone number, contact the Conference Manager (+1-760-751-5005).*

FARM TOURS

There will be several Farm and Tours around Ecuador. Please check the website for details.

TRAVEL AND HOTEL

Check the website: www.was.org



TENTATIVE SCHEDULE

Monday, September 7

Bag Stuffing	08:00 – 11:00
Registration Open	11:00 – 18:30
Exhibitor Move-in	08.00 – 18:30
Poster Set-up	11:00 – 18:30
LACC Board meeting (8pax)	13.00 – 17.00
Inauguration	17:00 – 17.30
Plenary Session	17:30 – 18:30

Tuesday, September 8

Registration Open	08:00 – 17:00
Exhibitor Move-in	08:00 – 10:00
Poster Set-up	08:00 – 12:00
Sessions	09.00 – 10.40
Coffee break	10:40 – 11:20
Sessions	11.20 – 13.00
Trade Show	10:00 – 19:00
Lunch (On your own)	13:00 – 14:20
Sessions	14.20 – 18.00
Refreshment break	16.40-17.00
LACC General Assembly	18:00-19:00

Wednesday, September 9

Registration Open	08:00 – 17:00
Sessions	09:00 – 11:00
Trade Show & Posters Open	11:00 – 19:00
Refreshment Break	11:00 – 11:20
Sessions	11:20 – 13:00
Lunch (On your own)	13:00 – 14:20
Sessions	14:20 – 18:40
Refreshment Break	16:40 – 17:00
President Dinner	19:00 – 21:30

Thursday, September 10

Registration Open	08:00 – 15:00
Sessions	09:00 – 11:00
Refreshment Break	11:00 – 11:20
Trade Show & Posters Open	10:00 – 16:00
Sessions	11:20 – 13:00
Lunch (On your own)	13:00 – 14:20
Sessions	14:20 – 17:40

