



世界水产大会 2017

可持续水产养殖
经济增长的新前沿
聚焦非洲

2017年六月26-30日

开普敦国际会议中心
南非开普敦

世界水产协会国际年会和博览会

承办
南部非洲水产养殖协会
南非共和国农林水产部

联合赞助单位
水产养殖工程学会
国际水产养殖经济与管理学协会
WorldFish组织



世界水产大会首次来到非洲大陆 – 在南非开普敦召开会议

世界水产大会2017年年会将在开普敦举行，届时将接待整个非洲大陆的国家 and 世界各国。水产养殖在非洲迅速增长，并越来越多地被接受到非洲大陆的饮食系统中，因此2017是世界水产养殖协会聚焦非洲的最佳时间。

世界水产大会2017年年会的盛大国际贸易展将通过来自世界各地的参展商了解最新的水产养殖技术的最佳地点。

请关注世界水产大会2017年年会的官方网页随时获得会议组织的最新消息: www.was.org

在非洲旅游的美妙机会

非洲是一个非常多样化的大陆，旅游机会不胜枚举——包括和野生动物近距离接触、远足、海滩和海洋、以及更多！

特别的企业交流会

在世界水产大会2015年年会首先开始的企业水产交流会为全球企业提供了一个交流案例、研发与新技术的平台。我们将在2017年继续这个成功平台。



世界水产大会2017将覆盖在非洲的水产养殖及世界其他地区的各个方面的议题。包括：

藻类养殖与生物学
两栖类和爬行类水产养殖
动物健康与管理
鱼菜共生综合水产养殖系统
水生动物兽医卫生条件
干旱土地水产养殖
澳洲肺鱼、鲈鱼和鲷
生物絮团系统
生物安全
生物技术
育种和遗传学
网箱养殖
蛤
鲤鱼
鲑鱼
蚌和巨蚌
环境变化和适应
军曹鱼
冷水物种
针对国家的分会（例如2008年挪威）
螃蟹和龙虾
小龙虾及淡水虾
发展、福利和扶贫（AWF）
疾病
药物与化学制剂
经济与管理（IAAEM）
生态系统推广

教育、推广和技术成果转化
鳗鱼
胚胎发育
新出现的问题
新兴物种
性状强化、驯化和海洋放牧
环境、生物多样性和气候变化
新能源和保护区
工程学
金融和投资
有鳍鱼类亲鱼成熟
鱼类健康
鱼粉和鱼油
偏口鱼
食品安全、检查和审计
食品保障
淡水物种
基本养殖
石斑鱼和鲷鱼
孵化和鱼苗管理
孵化管理
免疫学及疫苗
水产养殖信息技术
创新和高科技
集成的多营养层面水产养殖
营销与贸易
软体动物亲本和孵化
软体动物养殖

胭脂鱼
贻贝
营养与饲料
鲑鱼和墨鱼
近海水产养殖
有机水产养殖
观赏鱼
其他海洋鱼类
牡蛎
太平洋与原住民民族水产养殖
鳗鱼、胡子鲶和斑点叉尾
珍珠贝和女王凤凰螺养殖
生理、形态及组织学
浮游生物养殖
政策法规
混合养殖
池塘养殖
益生元制剂和益生菌
加工技术
产品质量
跑道式养殖池系统
循环水系统
水库水产养殖
鲑鱼和鳟鱼
海参和海胆
水产品和健康（GILLS）
海藻和藻类

虾场设计和管理
虾喂养和营养
虾遗传学、亲本和孵化场管理
虾病和生物安全
空间规划与调控
标准及认证
鲟
水产养殖可持续发展
罗非鱼
贸易
鳟
金枪鱼
城市水产
价值链发展
温水生物
废料再利用
水质及用途
水产养殖中的女性
鲷、鳊等
斑马鱼

可能的特别分会
赞助商特约分会
融资
环境变化的影响和对策
对虾白斑病分区（全球水生生物联合会）
有肺鱼类
强化非洲水产企业联盟



注册会议将包括以下内容:

- 参加所有会议项目、商业展会的通行证
- 参加宴会的入场券
- 会议纪念包、电子摘要集(配偶除外)
- 会间小点和会后付费酒吧
- 学生会员还可以参加学生论坛（需要在注册时出示学生证复印件）
- 只有预先注册的参会者才能保证有全面的会议资料



世界水产大会
2017

更多信息请联系：
世界水产大会2017年年会
会议经理

P.O. Box 2302 • Valley Center, CA 92082 USA
Tel: +1-760-751-5005 • Fax: +1-760-751-5003
Email: worldaqua@aol.com
www.was.org

提前注册将享受优惠!

CALL FOR PAPERS – DEADLINE: December 1, 2016

WORLD AQUACULTURE 2017 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 12 minutes for a presentation, plus 3 minutes for questions. Authors of studies involving proprietary products or formulations should present this information in workshops or the trade show. Oral presentations should use Power Point. Slides, overhead projectors and video players will not be available or allowed.

All presenters are required to pay their own registration accommodation and travel expenses.

WORLD AQUACULTURE 2017 cannot subsidize registration fees, travel or hotel costs.

No Abstract Book will be printed – an Abstract Book will be available online.

INSTRUCTIONS FOR PREPARATION OF ABSTRACTS

Expanded Abstract Format - Please refer to the sample.

- 1. TITLE OF PAPER:** The abstract title is printed in CAPITAL LETTERS, with the exception of scientific names which should be Upper/lower case and *italicized* (see example). Scientific names should not be preceded or followed by commas or parentheses or other markings.
- 2. AUTHOR(S):** The first name should be the presenting author. Use * after the presenting author. Type in upper/lower case.
- 3. ADDRESS AND EMAIL:** Type only the presenting author's institution, address and email. Type in upper/lower case.
- 4. MAXIMUM LENGTH:** One Page
- 5. PAGE SIZE:** Standard 8.5 x 11 inch paper (portrait)
- 6. MARGINS:** 1-inch margin throughout (left/right/top/bottom)
- 7. SPACING:** Single spaced
- 8. PARAGRAPHS:** Paragraphs should be separated by a blank line and should not be indented.
- 9. FONTS:** Character fonts should be 12 point type.
- 10. 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. The reduced figures and tables should be included in the abstract in camera-ready form.

1 inch margin (2.54 cm)

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

Laura A. Muzinic*, Kenneth R. Thompson, Tracey Christian, Carl D. Webster, Lukas Manomaitis, and David B. Rouse

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Kentucky State University
Frankfort, KY 40601
lmuzinic@csr.net

Red claw crayfish (*Cherax quadricarinatus*) are one of more than a hundred species of Australian freshwater crayfish. However, because of its rapid growth rate, ease of spawning, wide tolerance, and dissolved oxygen 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 this country and information exists on their nutritional requirements and practical diet formulations. Many crustaceans require lecithin and cholesterol to be added to their diet, these two nutrients are usually added; however, lecithin and cholesterol are very expensive. Since diet costs can be as much as 70% of the total expenses for an aquaculture enterprise, it is imperative that the least expensive diet be developed. To determine if the nutrient requirements of the species. The present study was conducted to determine if lecithin or cholesterol needs to be added to a practical diet for red claw crayfish.

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

	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
Lecithin 0.5	0.0	0.5	0.0	
Cholesterol	1.0	1.0	0.0	0.0
Other	38.5	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	3.64b	5.11a
Weight gain (%)	3384a	2897a	1717b	2454a
SGR (%/day)	5.74a	5.66a	4.68b	5.41a
Survival (%)	76.0	64.0	56.0	80.0

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.

1 inch margin (2.54 cm)

8.5 inches wide (21.6 cm)

PLEASE SUBMIT YOUR ABSTRACT ONLINE

**Submit your abstract via the internet at the meeting website.
Follow the complete instructions on the website for online submission.**

www.was.org

**If you are unable to submit your abstract online, contact the Conference Manager
for alternative methods at:**

worldaqua@aol.com or Fax: +1-760-751-5003



WORLD AQUACULTURE 2017

June 26-30, 2017

Register online at: 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@aol.com

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

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 April 26, 2017	Register by May 26, 2017	Register after May 26, 2017	* 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.
FULL CONFERENCE & TRADE SHOW In order to receive the Pre-Registration discount rate, this form and payment must be received by the date above				
WAS/CHAPTER MEMBER RATE* <input type="checkbox"/> US\$ 475	<input type="checkbox"/> US\$ 575	<input type="checkbox"/> US\$ 675	TOTAL REGISTRATION FEE US\$ _____	
WAS/CHAPTER STUDENT MEMBER RATE* Include copy of Student I.D. <input type="checkbox"/> US\$ 250	<input type="checkbox"/> US\$ 250	<input type="checkbox"/> US\$ 315		
AFFILIATE MEMBER RATE* <input type="checkbox"/> US\$ 545	<input type="checkbox"/> US\$ 645	<input type="checkbox"/> US\$ 745		
AFFILIATE STUDENT MEMBER RATE* Include copy of Student I.D. <input type="checkbox"/> US\$ 300	<input type="checkbox"/> US\$ 300	<input type="checkbox"/> US\$ 365		
Non-Member Rate <input type="checkbox"/> US\$ 580	<input type="checkbox"/> US\$ 680	<input type="checkbox"/> US\$ 780		
Student Non-Member Rate Include copy of Student I.D. <input type="checkbox"/> US\$ 320 <i>You can join WAS on the reverse side and use the Member Rate.</i>	<input type="checkbox"/> US\$ 320	<input type="checkbox"/> US\$ 390		
<input type="checkbox"/> Spouse Rate – must accompany a full registration Name _____ <input type="checkbox"/> US\$ 335	<input type="checkbox"/> US\$ 395	<input type="checkbox"/> US\$ 495		

TRADE SHOW PASS Good for 5 days admission to exhibits only – June 27, 28, 29	(Trade show pass is included with the Full Conference Registration) <input type="checkbox"/> US\$ 50	TOTAL TRADE SHOW PASS US\$ _____
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WORKSHOPS & TOURS – TBA	TOTAL US\$ _____
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MEMBERSHIP DUES – Enter amount from Membership Application on other side if applicable.	TOTAL MEMBERSHIP DUES US\$ _____
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Do not mail registration after May 15, 2017 or fax after May 15.
After May 15, 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 May 1, 2017. 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 May 1, 2017 or for "no shows". After May 1, 2017, 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 **WORLD AQUACULTURE 2017**.

For bank transfer details, contact us.

☐ Check # _____ ☐ Visa ☐ Mastercard ☐ American Express ☐ Discover ☐ Diners Club

Card # _____ Expiration Date _____

Name on Card _____ Date _____ Signature _____

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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
- ☐ 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
- ☐ Sociedad Brasileira de Acuicultura
- ☐ 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: +1-225-578-3137

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 1005/yr) Applies to an individual only

CHAPTER OPTIONS:

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

- ☐ **Asian Pacific**
- ☐ **Japan**
- ☐ **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).

许多参观农场的机会

农场参观的具体项目将尽快公布。请关注官网信息。

宾馆信息

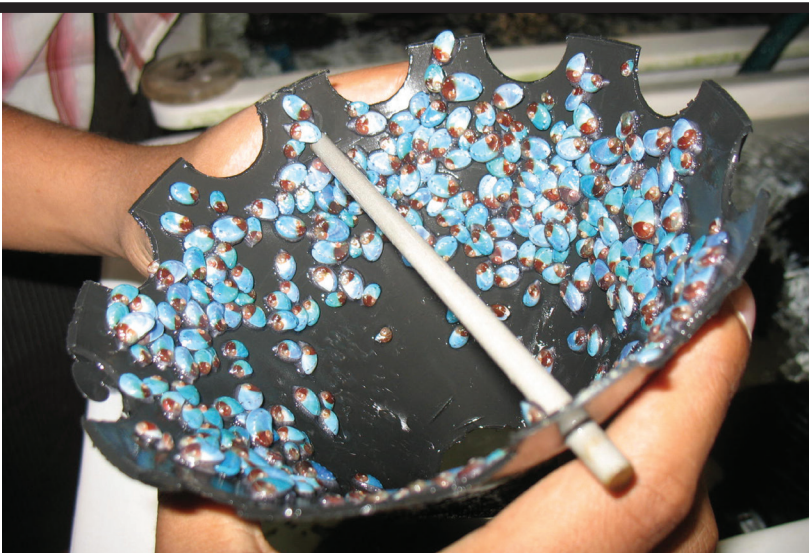
我们已经安排了一系列不同层面的住宿服务。请在网站上查找相应的宾馆信息。

商业展会时间

6月27日
10:30 - 18:00

6月28日
10:30 - 17:00

6月29日
10:30 - 16:00



会议暂定时间表

6月26日 星期一

开始注册 & 设立展台	1000 - 1700
协会工作会议	1600 - 1700
开幕式	1800 - 1900
欢迎宴	1900 - 2100

6月27日 星期二

开始注册	0730 - 1700
主题报告 & 学生讲演比赛	1030 - 1045
会间休息	1045 - 1120
商业展会	1030 - 1800
会议	1120 - 1240
午餐 (自行解决)	1240 - 1430
会议	1430 - 1710
会后沙龙和海报	1710 - 1800
学生论坛	1900 - 2100

6月28日 星期三

开始注册	0800 - 1700
会议	0900 - 1040
会间休息	1040 - 1110
商业展会	1030 - 1700
会议	1110 - 1250
午餐 (自行解决)	1250 - 1430
会议	1430 - 1710
会后沙龙和海报	1710 - 1800

6月29日 星期四

开始注册	0800 - 1600
会议	0900 - 1040
会间休息	1040 - 1110
商业展会	1030 - 1600
会议	1110 - 1230
午餐 (自行解决)	1230 - 1400
会议	1400 - 1520
会间休息	1520 - 1540
会议	1540 - 1720
商业展会撤离	1540 - 1900
主席欢迎宴	1900 - 2200

6月30日 星期五

开始注册	0800 - 1500
会议	0900 - 1040
会间休息	1040 - 1110
会议	1110 - 1230
午餐 (自行解决)	1230 - 1400
会议	1400 - 1540
会间休息	1540 - 1600
会议	1600 - 1720
会后沙龙	1730 - 1830

