

CALL FOR PAPERS – DEADLINE: December 31, 2023

ASIAN-PACIFIC AQUACULTURE 2024 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.**

Posters will have a featured and prominent place in ASIAN-PACIFIC AQUACULTURE 2024:

- Presenters that turn in the PDF or PowerPoint of their poster four weeks before the conference will have their poster reviewed at the end of the appropriate oral session.
- If turned in as stated above, the posters will also go on the conference website.
- Besides the two Happy Hours in the exhibits, there will be an additional Special Poster Viewing & Happy Hour on Friday.
- In the Program Book, special announcements will be made in the oral session lists of where relevant posters can be found.

Each oral presenter shall be entitled to no more than 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 should use Power Point. Overhead and slide projectors and video players will not be available or allowed.

All presenters are required to pay their own registration, accommodation and travel expenses. ASIAN-PACIFIC AQUACULTURE 2024 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.

- 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 (see sample). 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 A4 paper (210mm x 297mm = 8.27" x 11.69")(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.
- PHOTOS, FIGURES & TABLES:** Photo, figures and tables are highly recommended and they may be in color. They should be reduced to the appropriate size to fit a one page abstract and should be clearly readable at the reduced size. The reduced figures and tables should be included in the abstract.

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

Aquaculture Research Center
Kentucky State University
Frankfort, KY 40601
lmuzinic@dcr.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 temperature 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 because specific information exists on their nutritional requirements and practical diet formulations. Since many crayfish diets 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 10% of the total expenses for an aquaculture enterprise, it is imperative that the least expensive diet that meets the nutrient requirements of the species. The present study was conducted to determine if cholesterol and/or 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 newly-hatched juvenile (initial weight of 0.2 g) red claw, each stocked in individual plastic mesh culture units. Individual units were placed within fiberglass tanks, each with an individual water line. Water was recirculated through biological and mechanical filters. Water temperature was maintained at 27-29°C and lighting was provided by overhead fluorescent ceiling lights (14-hour light:dark cycle). Ammonia, dissolved oxygen, temperature, alkalinity, chlorides, and pH were measured three times per week. The goal of the study was to examine the effects of growth performance of newly-hatched juvenile red claw when fed four practical diets with or without cholesterol and lecithin. 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 (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.

2.5 cm margin

21 cm wide

29.7 cm long

2.5 cm margin

2.5 cm margin

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	6.00b	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

PLEASE SUBMIT YOUR ABSTRACT ONLINE

www.was.org