

## **REQUEST FOR PROPOSAL**

### **SUBMISSION DEADLINE**

**5:00 PM CST, 5/12/2021**

### **RFP TITLE: AQUACULTURE NUTRITION RESEARCH – COMPARATIVE ANALYSIS OF SOY FROM DIFFERENT ORIGINS**

#### **RFP CONTACT:**

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#### **PROPOSAL DEADLINE: MAY 12, 2021**

#### **INTRODUCTION:**

The aquaculture sector is expected to grow significantly over the next ten years in response to increasing consumer demand for aquaculture-produced fish, shrimp, and seafood. To meet the related demand for aquafeeds, aquaculture feedmills aim to produce feeds that optimize nutrient availability and minimize cost to the aquaculture producer. This creates opportunities to promote U.S. soy to aquaculture producers and feed mills as a reliable, high quality source of nutrition in aquafeeds that delivers superior value and facilitates sustainable practices. Existing research demonstrates the advantages of incorporating U.S. soy into feed for terrestrial animals. However, at present, there is less information on the relative performance of U.S. soy in aquafeeds as compared to soy from other origins.

#### **PURPOSE OF RFP:**

USSEC seeks a U.S. university to initiate and oversee a study to compare the growth performance and nutrient utilization of an omnivorous or herbivorous fish fed with aquafeed containing U.S. soy as the soy ingredient source, versus feeds with Brazilian soy as the exclusive soy ingredient. Preferably, the study would also include a comparison to aquafeed with Argentinian soy. The university will conduct an experiment similar to those completed under a previous USSEC contract (further described below) with the aim of verifying the mechanism that produced the results. The study itself does not need to be conducted in the United States, but will require a U.S. university to oversee a rigorous trial design to obtain quality data. USSEC encourages applications that include partnerships with other research institutions located outside the U.S.

#### **BACKGROUND & PURPOSE OF PROJECT:**

USSEC supports a portfolio of research projects which are ultimately designed to optimize the use of U.S. soy in aquafeeds specifically and aquaculture systems more broadly. For the past three years, USSEC supported an aquaculture nutrition research trial in China to compare the

grow performance and nutrient utilization of tilapia when fed U.S. soy-optimized aquafeeds versus Brazilian soy-optimized aquafeeds.

The study indicated that there are no significant differences in nutrient digestibility between U.S. soybean meal and Brazilian soybean meal, but that tilapia fed U.S. soybean meal demonstrated slightly better growth -- likely due to better protein gains. Additionally, results suggested that U.S. soy promotes better somatic growth, and that U.S. soybean meal improves energy retention and efficiency of lipid deposition in fish muscle, but not in visceral mass or the liver. The study did not include chemical analysis of the fish to determine protein, amino acids and other nutrient gains.

Through this RFP, USSEC seeks a U.S. university to conduct or conduct by partnering with a non-U.S. university an experiment, replicating this previous study, to specifically evaluate the differences in nutrient digestibility, protein gain, somatic growth, energy retention, and efficiency of lipid deposition in fish muscle between U.S. soy-optimized and Brazilian soy-optimized feeds. Preferably, the study will also include a comparison to Argentinian soy-optimized feeds. USSEC will provide the successful applicant with further details on the experimental design and preliminary results to enable reproduction of the experiment.

As differences in soybean meal quality can be attributed to origin of the soybeans or processing, it is important that trials use soybean meal samples produced at the same crushing facilities and following the same crushing standards. Applicants should be aware that, in the U.S., it can be difficult to obtain representative samples from other origins and that is why the U.S. university has the option to partner with a non-U.S. university to conduct this work.

**TARGET AUDIENCE:** The direct audience for this research is the USSEC Global Research Committee and USSEC aquaculture teams. Ultimately, they will use the information derived from the study to communicate with feedmills and aquaculture producers.

**SCOPE (SERVICES) OF WORK:**

- Conduct growth trials on the comparative nutritive value of U.S. soy-optimized aquafeed versus that of Brazilian soy-optimized aquafeeds on select herbivorous and omnivorous species. Preferably, the trials will also include Argentinian soy-optimized aquafeeds. The study will closely mirror the previously-conducted trials. This will include collecting data on the following indicators, amongst others: feed conversion ratio (FCR); feed efficiency; protein, energy and lipid retention efficiency; kg/ha and kg/day; cost/kg biomass; flesh quality; and shelf life. The study will also include histopathological diagnosis and analysis of any dorsal intestinal issues.
  - To control for differences in soybean meal quality due to crushing conditions, the study will use soybean meal samples produced by the same crusher following the same standards. Similarly, the study will use aquafeed samples produced by the same feedmill. Note that meeting this condition may require conducting the study outside of the U.S. as it is often difficult to obtain representative samples in the U.S.

- Analyze the quality and nutritional value of soybeans/soybean meal used in the aquafeeds. This will include mycotoxin analysis as well as chemical indicators of heat damage.
- Conduct further analysis to identify the mechanisms underpinning the results. This could involve further examination of the differences in nutrient digestibility and bioavailability.
- Conduct an analysis of the economic implications of using the different feed options under evaluation.

**ADDITIONAL CONSIDERATION**

USSEC will provide the successful applicant with further details on the experimental design and results to date in order to facilitate trial design. In the proposal, applicants should include an illustrative study design for purposes of demonstrating their knowledge of the subject matter and qualifications to perform the work. However, the final design will be developed jointly with USSEC to mirror the previously-conducted work.

USSEC-funded research is typically targeted to be rapidly disseminated to industry and many trials are designed to have a direct commercial applicability. Results of the study remain the property of USSEC and these results may be disseminated in various formats by USSEC. As this study will be overseen by a U.S. university, it is understood that the researcher(s) may have an interest in publishing the results of the study in an industry publication or journal. This may be possible but will require written permission from USSEC, agreement on the target publication and final text submission.

**DELIVERABLES:**

<b>Completion Date</b>	<b>Description of Deliverables</b>
Within 10 business days of contract signing	Finalize study design with the USSEC team based on information received from USSEC about the previous study.
September 30, 2021	Submit draft report on study findings to include raw data, data analysis (economic and statistical), and conclusions for USSEC review and comment.
October 31, 2021	Submit final report on study findings with USSEC comments addressed.

**PROJECT TIMELINE:**

USSEC anticipates the contract will begin May 25, 2021 and end October 31, 2021.

**RFP TIMELINE:**

- **RFP Distribution:** April 21, 2021
- **Last Day to Submit Questions:** May 5, 2021 by 5:00PM Central Time
- **Project Proposals Due:** May 12, 2021 by 5:00PM Central Time

- **Selections Made By:** May 15, 2021
- **Prospective Contractors Notified By:** May 17, 2021

#### **INSTRUCTIONS:**

Proposals must contain at a minimum the specific criteria listed below:

1. Please email the proposal to [RFP@USSEC.ORG](mailto:RFP@USSEC.ORG) by **5:00PM Central Time on May 12, 2021**
2. A description of Prospective Contractor's capabilities, resources and experience. Emphasis should be placed on experience related to this RFP.
3. A thorough proposal outlining Prospective Contractors planned work, deliverables and timeline to complete the work.
3. Resumes for each of the Prospective Contractor's personnel assigned to work directly on the implementation of the contract.
4. Provide a minimum of two names and contact information for other similarly sized clients for reference purposes.
5. Detailed Budget
  - All bids for services must provide a breakout of how the fee was derived including but not limited to a breakdown of hourly rate and the amount of effort they anticipate to do the work.
6. Proposals should be no longer than **10 pages** (8 ½" x 11").

#### **NOTES:**

- Prospective Contractors are hereby notified that proposals will be duplicated for internal review only. Every effort will be made to maintain confidentiality of all information presented. The appropriate representatives from staff and legal counsel will review proposals. Proposals will not be returned.
- USSEC reserves the right to retain all proposals submitted. Submission of a proposal indicates acceptance by the submitter of the conditions contained in the request for proposal, unless clearly and specifically noted in the proposal submitted and confirmed in the contract between USSEC and the contractor selected.
- Confidentiality - Without USSEC's prior written consent, Prospective Contractors and its officers, employees, agents, representatives, affiliates, and subcontractors shall not disclose to any third party any documents, materials or information that the Prospective Contractors learns from or is provided in relation to the RFP request.

- During the evaluation process, USSEC reserves the right to request additional information or clarifications from proposers, or to allow corrections of errors and omissions.
- USSEC reserves the right to reject any proposal that is in any way inconsistent or irregular. USSEC also reserves the right to waive proposal defects or deficiencies, to request additional information, and/or to negotiate with the Prospective Contractor regarding the proposal.
- Prospective Contractor agrees that Fees are in lieu of any and all other benefits, including, but not limited to, repayment of any and all taxes related to contractor service fees, health and life insurance, administrative costs and vacation.
- Prospective Contractor agrees that any income taxes, value added taxes or any other form of direct or indirect taxes on compensation paid under the contract shall be paid by Contractor and not by USSEC or Funding Sources.
  - Prior to any payment to a Contractor, a contractor must provide a W-9, W-8, or W-8BEN upon agreement signature
- Non-Competition. Contractor shall not act as agent or representative for any product or service directly or indirectly competitive with U.S. soybeans or soybean products for the length of the contract.
- USSEC and Prospective Contractor agrees to comply with the provisions of Equal Employment Opportunity (EEO). USSEC provides EEO to all employees and applicants for employment without regard to race, color, religion, gender, sexual orientation, gender identity or expression, national origin, age, disability, genetic information, marital status, amnesty, or status as a covered veteran in accordance with applicable federal, state and local laws.

## SUPPLEMENTAL INFORMATION AND BACKGROUND

### *BUILDING A PREFERENCE FOR U.S. SOY*

**USSEC's strategy** can be found here: <http://ussec.org/about-ussec/vision-mission/>

**USB's Long Range Strategic Plan** can be found here: <http://unitedsoybean.org/about-usb/strategic-planning/>

We are a dynamic partnership of key stakeholders representing soybean producers, commodity shippers, merchandisers, allied agribusiness and agricultural organizations.

Through a global network of international offices and strong support in the U.S., we help build a preference for U.S. soybeans and soybean products, advocate for the use of soy in feed, aquaculture and human consumption, promote the benefits of soy use through education and connect industry leaders through a robust membership program.

Our 15-member board of directors is comprised of four members from the American Soybean Association (ASA), four members from the United Soybean Board (USB), and seven members representing trade, allied industry, and state organizations.

New board members are seated annually. We are receiving funding from a variety of sources including soy producer checkoff dollars invested by the USB and various state soybean councils; cooperating industry; and the American Soybean Association's investment of cost-share funding provided by the United States Department of Agriculture's (USDA) Foreign Agriculture Service.

The United Soybean Board, created by the 1990 Farm Bill to manage and direct the National Soybean Checkoff, is dedicated to marketing and research for the soybean industry. USB is comprised of 73 volunteer soybean farmers representing the interests of fellow growers nationwide. Each board member is nominated by Qualified State Soybean Boards (QSSBs) and appointed by the U.S. Secretary of Agriculture.

Because of the limitations on administrative and salary costs established in the Act, USB outsources the majority of its program management responsibilities to USB's three primary contractors:

- SmithBucklin-St. Louis for domestic marketing, new uses, production research and Board initiative activities;
- Osborn & Barr Communications for communications/public relations activities and;
- U.S. Soybean Export Council (USSEC), Inc. for international marketing and global opportunities activities.

As one of these three primary contractors USSEC may also undertake initiative activities on behalf of USB. USB considers primary contractor staff (approximately 60 people) as core USB staff. These three primary contractors use a number of subcontractors and, together, these entities carry out approximately 450 projects each year for USB. USB also manages approximately 10 subcontractors.

## **Non-Discrimination Statement**

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotope, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 {voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at [How to File a Program Discrimination Complaint](#) and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: [program.intake@usda.gov](mailto:program.intake@usda.gov).

USDA is an equal opportunity provider, employer, and lender.

**Civil Rights Clause**

Contractor agrees that during the performance of this Agreement it will not discriminate against any employee or applicant for employment because of race, color, religion, gender, national origin, age, disability, political beliefs, sexual orientation, marital or family status, parental status or protected genetic information. Contractor further agrees that it will fully comply with any and all applicable Federal, State and local equal employment opportunity statutes, ordinances and regulations, including, without limitation, Title VII of the Civil Rights Act of 1964, the Americans with Disabilities Act of 1990, the Age Discrimination in Employment Act of 1967, and the Equal Pay Act of 1963. Nothing in this section shall require Contractor to comply with or become liable under any law, ordinance, regulation or rule that does not otherwise apply to Contractor.