

Job Title: Graduate Student - Entomology

Location: University of Arkansas, Fayetteville, AR

Job Description:

We are launching a transformative project to develop a cochineal insect pilot farm and a full-scale commercial facility in NW Arkansas. Our goal is to integrate advanced technology with sustainable practices to redefine the cochineal industry.

We are seeking a highly motivated and skilled graduate student in the field of entomology (or similar) to set up and operate a pilot facility dedicated to the production of cochineal insects (*Dactylopius coccus*). This position represents a crucial step towards building a commercial indoor production facility aimed at promoting sustainable practices in the production of natural dyes and contributing to the local economy. The successful candidate will play a vital role in establishing the groundwork for future expansion and scalability.

Key Responsibilities:

- **Facility Setup:** In collaboration with the team, design and outfit of the pilot production facility, ensuring it meets all necessary requirements for the cultivation of cochineal insects.
- **Research & Development:** Conduct research on optimal growth conditions, feedstock formulation, breeding techniques, pest management strategies and scalable production practices specific to cochineal insects to maximize production efficiency.
- **Operational Management:** Manage daily operations of the facility, including cultivation, harvesting, and processing of cochineal insects. Monitor and evaluate production metrics to ensure quality and productivity.
- **Training & Supervision:** Train and supervise staff in the techniques of cochineal insect cultivation, including best practices in care, maintenance, and harvesting.
- **Collaboration:** Liaise with agricultural experts, universities, and research institutions to stay updated on advancements in entomology and cochineal production.

- Sustainability Practices: Implement and promote sustainable farming practices that minimize energy use, environmental impact and enhance the viability of cochineal production in the region.
- Documentation & Reporting: Maintain detailed records of production processes, outcomes, and research findings. Prepare reports for stakeholders and capture learnings to support production facility development.
- Facility Scale-Up. Support the design and development of the full-scale production facility, including commissioning and operational planning.

Qualifications:

- Degree in Entomology, Evolutionary Biology, Agricultural Science, or a related field with a focus on insects.
- Proven experience in insect rearing and research, is highly desirable.
- Fluent in English with strong communication skills, and Spanish would be an important asset as a considerable amount of the research in this area is being completed in predominantly Spanish speaking countries.
- Strong analytical and problem-solving skills, with the ability to conduct independent research.
- Experience working in technology commercialization or technology transfer/licensing, is desirable.
- Excellent communication and interpersonal skills, capable of working collaboratively with a diverse team.
- Familiarity with sustainable agricultural practices and a passion for promoting environmentally friendly production methods.

Benefits:

- Financial package to support graduate studies and research program.
- Graduate advisors from faculty and the private sector.
- Opportunity to lead innovative research in an emerging industry.
- Collaborative work environment with a focus on sustainability and community impact.

If you are enthusiastic and ready to take on a pioneering role in cochineal insect production, we encourage you to apply for this exciting opportunity.

How to Apply:

Interested candidates should reach out to Keith Driver (President) at info@naturesred.com. Please include "Cochineal Graduate Project - [Your Name]" in the subject line. Contact Dr. Ashley Dowling for information on applying to the graduate program, at adowling@uark.edu.

Application Deadline:

The position will be posted until filled with the ideal candidate.