Opportunity Title: USDA-ARS Postdoctoral Fellowship in Coffee Leaf Rust Management
Opportunity Reference Code: USDA-ARS-2022-0405

Organization	U.S. Department of Agriculture (USDA)
Reference Code	USDA-ARS-2022-0405
How to Apply	***Connect with ORISE...on the GO!*** Download the new ORISE GO mobile app in the Apple App Store or Google Play Store to help you stay engaged, connected, and informed during your ORISE experience and beyond!

A complete application consists of:

- An application
- Transcript(s) – For this opportunity, an unofficial transcript or copy of the student academic records printed by the applicant or by academic advisors from internal institution systems may be submitted. Click here for detailed information about acceptable transcripts.
- A current resume/CV, including academic history, employment history, relevant experiences, and publication list
- Two educational or professional recommendations

All documents must be in English or include an official English translation.

Application Deadline	3/16/2023 3:00:00 PM Eastern Time Zone
Description	***Applications may be reviewed on a rolling-basis.**

ARS Office/Lab and Location: A postdoctoral research opportunity is currently available with the U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS), at the US Pacific Basin Agricultural Research Center located in Hilo, Hawaii.

The Agricultural Research Service (ARS) is the U.S. Department of Agriculture's chief scientific in-house research agency with a mission to find solutions to agricultural problems that affect Americans every day from field to table. ARS will deliver cutting-edge, scientific tools and innovative solutions for American farmers, producers, industry, and communities to support the nourishment and well-being of all people; sustain our nation's agroecosystems and natural resources; and ensure the economic competitiveness and excellence of our agriculture. The vision of the agency is to provide global leadership in agricultural discoveries through scientific excellence.

Research Project: The postgraduate will participate in research on coffee leaf rust (CLR, Hemileia vastatrix), a devastating disease of coffee that has recently established in Hawaii and is causing extensive damage to this economically important crop. The research activities will involve project planning, experimental

design, methods development, field data collection, summary and analysis of data, and presentation of findings. The primary project will involve area-wide CLR monitoring across Hawaii's diverse coffee-growing regions. Data collected on CLR incidence, weather, management practices, and crop phenology will be used to determine optimal IPM strategies for CLR in Hawaii and will inform the development of predictive models to assist coffee growers in decision making.

Other potential projects are aimed at 1) developing precision agriculture tools for coffee pest and disease management including drone technology, mobile applications, and sensor networks, and 2) conducting greenhouse/growth chamber/field experiments to improve our understanding of soil/plant health in minimizing the impacts of plant pests and pathogens. The participant will present findings at local/national conferences and will publish in peer-reviewed scientific journals.

Learning Objectives: This opportunity will provide the postgraduate with knowledge of Hawaii's unique and economically important coffee industry, while providing exposure and experience in field data collection, precision agriculture, coffee plant and soil health, plant pathology, cultural and biological controls, fungicide resistance, disease management, and qualitative/quantitative forecasting models. This appointment will provide the training necessary to prepare the postgraduate for an exciting career in biological research.

Mentor(s): The mentor for this opportunity is Melissa Johnson (melissa.johnson@usda.gov). If you have questions about the nature of the research, please contact the mentor(s).

Anticipated Appointment Start Date: July 1, 2023. Start date is flexible and will depend on a variety of factors.

Appointment Length: The appointment will initially be for one to three years, but may be renewed upon recommendation of ARS and is contingent on the availability of funds.

Level of Participation: The appointment is full-time.

Participant Stipend: The participant will receive a monthly stipend commensurate with educational level and experience.

Citizenship Requirements: This opportunity is available to U.S. citizens only.

ORISE Information: This program, administered by ORAU through its contract with the U.S. Department of Energy (DOE) to manage the Oak Ridge Institute for Science and Education (ORISE), was established through an interagency agreement between DOE and ARS. Participants do not become employees of USDA, ARS, DOE or the program administrator, and there are no employment-related benefits. Proof of health insurance is

required for participation in this program. Health insurance can
be obtained through ORISE.

Questions: Please visit our Program Website. After reading, if
you have additional questions about the application process
please email ORISE.ARS.PacificWest@orau.org and include the
reference code for this opportunity.

Qualifications	The qualified candidate should have received a doctoral degree in one of the relevant fields (e.g., Biology, Ecology, Agriculture, Plant Pathology, Computational Biology, Mathematical Modeling), or be currently pursuing the degree with completion before the appointment start date.
Eligibility Requirements	**Citizenship:** U.S. Citizen Only **Degree:** Doctoral Degree. **Discipline(s):** **Communications and Graphics Design** (1 👁) **Computer, Information, and Data Sciences** (4 👁) **Earth and Geosciences** (2 👁) **Environmental and Marine Sciences** (3 👁) **Life Health and Medical Sciences** (10 👁) **Mathematics and Statistics** (4 👁)