



Botany Research Assistant

Description

Nestled in the Peruvian Amazon, the Kosñipata Valley spans elevations from 500m to 3400m and is home to the Wayqecha Biological Research Station at 2900m. This region's diverse ecosystems, ranging from lowland rainforests to high-altitude cloud forests, make it a prime site for botanical research. Plants are crucial to these ecosystems, supporting a myriad of life forms and ecological functions.

Our botany program at Wayqecha focuses on understanding plant diversity and responses to environmental changes across this altitudinal gradient. We inventory species, conduct germination experiments, and collect DNA to study plant community dynamics under the pressures of climate change and human impact.

Our work aims to map the valley's plant biodiversity, assess ecosystem health, and guide conservation efforts to protect this vital region's ecological integrity for future generations.

Project outcomes

- Investigate growth patterns of various plant species through germination tests at different heights to determine the impact of altitude on seed development.
- Set up and oversee plots that either include or exclude livestock to assess their effects on plant ecosystems.
- Track plant species across ecotone boundaries to gain insights into transitional areas. Perform comprehensive surveys of trees, shrubs, herbs, and epiphytes at varied mountain elevations to document biodiversity shifts related to altitude.
- Catalog the range of species encountered and gather DNA from plants to build a genetic barcode library, enhancing species identification and supporting conservation initiatives across elevation gradients.

Roles and Responsibilities

- Initiate and supervise experiments on seed germination at various altitudes to study growth outcomes.
- Document the environmental conditions and track the progress and growth of seeds in these germination studies.
- Create and maintain plots with and without livestock access to evaluate the influence of grazing on plant populations.
- Survey and catalog species found in ecotone areas to understand ecosystem transitions. Carry out extensive fieldwork to list tree, shrub, herb, and epiphyte species at all elevations. Employ GPS technology for precise mapping of species locations and their altitudinal distribution.
- Collect samples from plants and botanical tissues for DNA extraction, aiming to establish a genetic barcode library.
- Analyze collected data to uncover trends in species diversity and distribution. Develop reports and presentations to disseminate findings from the research. Work collaboratively with team members and engage with local communities for effective data gathering and project implementation.



Requirements:

- Seeking graduates in Biology, Ecology, or related fields
- Proficient in English and Spanish.
- Must be physically fit,
- Minimum 3-month commitment
- Bachelor's degree in natural sciences or equivalent experience
- Enthusiasm and strong work ethic
- Flexibility in schedule and work/living environment
- Maturity (must live and work well with others in a close setting)
- For internationals -Traveler's insurance (proof required upon acceptance) Driving license for car and/or motorbike (highly desirable)

How to Apply

To apply, send 1) CV, 2) letter of interest, 3) recommendation letter. Combine documents into a PDF and email comunicacion.wayqecha@conservacionamazonica.org. Include in the subject heading "ICFC Field Biologist Scholarship Botany RA" and full name. Emails without this subject heading will be discarded. Incomplete applications won't be considered.

This position starts ASAP at Wayqecha Biological Station. This position will remain open until the position is filled.