Scientific Assistant – Tree Fruit Pathology and Extension

Scientific Assistant in Tree Fruit Pathology and Extension Available at WSU Wenatchee

Join our exciting team to support the research and outreach activities of the Tree Fruit Extension Program focusing on Fire Blight and Apple Replant Disease. More than 47,000 acres of fruit trees are at risk to apple replant disease every year while potential risks to human and environmental health threaten to eliminate fumigation which is currently used to reduce replant risk. Join an ongoing research project to evaluate alternative controls for replant disease including anaerobic soil disinfestation and mustard meal bio-renovation. Fire blight is an important disease of apple and pear with annual national losses and control costs estimated at over $100,000 million. This position will conduct product evaluations to find new biopesticides and other tools to prevent fire blight infections as well as investigate common grower questions concerning cultural practices including best management practices for cutting blight and mowing blight cuttings.

POSITION DESCRIPTION

The incumbent will work as part of the Tree Fruit Extension program teams in North Central Washington. The incumbent will conduct multiple aspects of projects focusing on Apple Replant Disease and Fire Blight management in tree fruit. He or she will perform a wide range of duties including field work, laboratory analysis, data analysis, grant management and organization of workshops and outreach activities. This project will require a high degree of communication and collaboration with industry. The individual may manage the project including overseeing student workers, organizing trials, and working with collaborators. Duties will include coordination with grower collaborators on field activities; conducting spray trials; field sampling and measurement; conducting root bioassays; compilation of outreach materials including factsheets, videos, web articles, newsletter articles and handouts; coordination of outreach activities including field days and winter meetings, and giving outreach presentations. Other required activities include data entry, summary, statistical analysis, preparation of presentations and reports. Experimental and analytical skills, precision, reliability, understanding and knowledge of research theory, excellent organizational skills are required. Ability to work outdoors in all-weather required.

QUALIFICATIONS

Earned Master’s Degree in Plant Pathology or closely related science field, 2) Strong interest in applied research and outreach, 3) Strong analytical and statistical skills, 4) Ability to work independently as well as with an interdisciplinary team of researchers, extension specialists, and other project participants, 5) Preference will be given to candidates who are bilingual in Spanish/English.

Visit http://treefruit.wsu.edu/tianna-dupont/ for more information about the team.
JOB DUTIES & RESPONSIBILITIES

Project management 15%
- Organizing and carrying out field and laboratory trials.
- Preparing protocols.
- Supervising student helpers.
- Data entry, summary, statistical analysis, preparation of presentations and reports.
- Completion of travel and grant paperwork.
- Locate and purchase supplies.

Field and Greenhouse Trials 30%
- Plan, elaborate and conduct field trials including developing protocols, organizing work plans, implementing treatments, applying pesticides, evaluating results.
- Take field measurements including soil and root samples, plant measurements, fruit harvest.
- Conduct greenhouse bioassays.

Laboratory experiment and analysis 30%
- Create protocols and carry out analysis.
- PCR analysis of soil and root samples.
- Bacterial sample analysis including culturing of Erwinia, bioassays, LAMP measurements.
- Enter and summarize data using computer spreadsheets and an online database.
- Diagnostics of plant samples.

Outreach 20%
- Communicate with growers and industry through phone calls, online database, email, and participation in local meetings.
- Work with Extension to organize, market, and evaluate educational events including field visits and intensive trainings under the mentorship of the project lead.
- Develop presentations, reports and educational materials (which may include activities, videos, and manuals).

ESSENTIAL WORK COMPETENCIES

Knowledge, skills and abilities
- Working knowledge of agricultural systems.
- Advanced knowledge in biological or physical science.
- Able to communicate clearly though both spoken and written communication.
- Experimental and analytical skills, precision, reliability, understanding and knowledge of research theory.
- Basic field work skills necessary.

Mental Requirements
- Initiative: takes ownership of his or her work, does what is needed without being asked, follows through on tasks and commitments.
- Efficiency and Organization: Plans ahead, able to manage time and always thinking of better ways to do things.
- Coachable: Receptive to feedback and willing to learn and embrace continuous improvement.
- Critical thinking and problem solving.
- Ability to work as part of a team and work independently.

Physical Requirements
- This position requires significant outdoor work from March to September. Wenatchee is hot in the summer and the incumbent will have to work in all weather conditions.
- The incumbent will drive to study locations in the vicinity which may be multiple hours away. He or she must have a high driving competency.
- Physical ability to lift and carry 35 lbs, walk quickly for multiple hours, stand, kneel, crouch and climb ladders repetitively for multiple hours per day for multiple day stretches.