AGRONOMY SUMMER TECHNICIAN
CROPPING SYSTEMS

Contact and Supervisor:
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There are several positions open positions. These positions are open until filled. Review of application will start on 27 January and will continue until filling these positions.

Timeline for this job position:
Start date: April 1st 2022 (or May 1st at the latest)
End date: end of August 2022 (or even until October 31st)

General description
The agronomy summer technician is responsible for following protocols to conduct field research projects within a team comprised of the agronomy research technician lead and agronomy summer technicians within the team. Agronomic research is conducted on annual crops and advanced agronomic practices, including: crop population dynamics, crop nutrition and fertility, weed populations and control, herbicide and fungicide performance, plant growth regulators, plant disease, insect pest and beneficial and cropping systems.

The employee assists the research team to implement field trials with the safe and accurate application of agronomic treatments. The research work is diverse rather than routine. Because it may also involve application of pesticides and transportation of equipment, it requires an understanding of safety procedures. The position requires a basic understanding of field plot research methodology and collection of specialized data.

This individual will be trained and will contribute to establishing, maintaining and harvesting field research trials, applying fertilizers and pesticides and data collection. This includes the use of research scale farm equipment, including seeders, sprayers and harvesters. The summer technician will also enter research data into excel and may assist in summarizing the data.

The employee is under the direct day-to-day direction of the Agronomy Research Technician Lead. We welcome applications from any applicant with strong interest in working with us; this includes undergraduate students as well as other applicants with farming experience or background or other backgrounds.

RESPONSIBILITIES/ACTIVITIES

(95%) Participate directly in research projects

Provides support for the agronomic research program:

- In collaboration with other agronomy research technicians, carries out field operations
- Conduct research activities at off-station field research sites (Namao) including soil sampling, seedbed preparation, seeding, treatment applications, harvesting, data collection, weed, disease and pest control, chemical and fertilizer applications, tissue sample collection and preparation, soil and biomass grinding. Preparatory and supplementary research activities will also take place in Edmonton South Campus and St. Albert (both research stations of University of Alberta).
- Field work includes using a tape measure to precisely place flags into fields to mark research plot boundaries, operating a mechanized seeder, identifying and counting crop and weed species, determining plant growth stage, safely mixing and applying herbicides using a backpack or tractor mounted sprayer, measuring crop height, harvesting plants by hand or with a mechanized combine, cleaning seed using simple machines such as fans, weighing, processing field samples, and subsampling seed for further analysis.
- Organizes research materials for seeding, treatment applications, data collection and harvest.
- Prepares, labels, and arranges shipment of samples and supplies.
- Liaises with other staff in ensuring proper field operations and equipment maintenance.
- Ability to lift 50 lbs is a requirement.
- Farm experience would be a strong asset

(5%) Data entry into Excel and may assist in summarizing the results.

- enters data in electronic databases
- ensures data accuracy and reports abnormal data to supervisor

OH & S procedures (involved with all work)

- Responsible for safe equipment operation through proper training
- Adheres to health and safety procedures as outline by WHMIS, Occupational Health and Safety and other safety programs.
- Adheres to the phyto-sanitary procedures to prevent the introduction and spread of pests and diseases.

KNOWLEDGE

- Minimum requirement is a high school diploma, however, agricultural experience will be considered a strong asset.
- Experience transporting and operating small field research plot equipment and tractors will be considered a strong asset
- Demonstrates a basic knowledge and practical understanding of western Canadian crop production
- Ability to accurately follow written protocols and pay attention to detail to ensure that all research is completed with scientific accuracy. The incumbent whether working individually or in a team must ensure work and data collection is completed according to protocol (set out by the Agronomy Research Technician Lead) and any abnormal observations are reported

- Working knowledge of various computer software but not limited to: Microsoft; Excel, Word, Outlook and PowerPoint.
- Strong ability to work effectively as part of a team or independently.
- Uses excellent organization and communication skills (verbal and written)
- Must be capable of working effectively outdoors for several hours a day under possibly extreme temperature and environmental conditions
- First Aid Training
- A valid driver license and clean driving record/abstract (full class 5 non-probationary; GDL is not acceptable)

Equipment or tools used in the job

Equipment and tools include:
- highly specialized plot research equipment such as: tractors, plot fertilizer applicator, plot seeder, plot sprayers, plot combine, RTK GPS guidance, mowers, harrows, tractors, Hege seed treaters, forklift, transect, generator, shop vacuum, CO_2 backpack sprayer systems, calibration kits, Clipper seed cleaner.
- 4x4 trucks (half ton, 3/4 ton, 1 ton, 3 ton), pulling trailers (bumper pull, gooseneck, 5th wheel, tilt-deck, tip box grain trailers), soil coring truck, load and unload specialized research equipment
- small manual and powers tools: sledge hammer, cordless drills, cordless hand trimmers, weed eaters, pick forks, shovels, grain shovels, hoes, foot soil probes, rakes, hand clippers.
- staking equipment: tape measures, flags, GPS, Transect
- data collection instrumentation: Trimble NDVI, LAI Ceptometer - LP-80, Field Scout Chlorophyll Meter - CM1000, soil moisture meters, seed counters, dickey john, scales, HOBO sensors, Canopy Humidity sensors, other specialized field research equipment
Software tools include: Microsoft Office, Google Earth, Mirus harvest software, HOBO software, data and file management tools.

Interested candidates should e-mail a short CV, a short letter describing their previous work, experience and interests (1-page limit), and the names and contact information of two references.