Position Description Southern Research and Outreach Center College of Food, Agricultural and Natural Resource Sciences (CFANS)

Position Title: Research Plot Technician Date: 22 January 2024

Reporting To: Charlie Rohwer

U Classification: Research Plot Technician **Pay Range:** 43,264-51,833.60

U Classification #: 4926 AFSCME Technical

Position and/or Unit Overview:

The Southern Research and Outreach Center (SROC) in Waseca, MN, encompasses over 900 acres used for production and research. Horticultural crops studied at the SROC include peas, sweet corn, tomatoes, onions, carrots, and pumpkins. A broad range of topics are studied to help meet stakeholder needs and address sustainability, including variety trials, nutrient management, cover cropping, and systems management. Conventional production methods are used but some research utilizes organic practices. Projects are mainly under the direction of SROC researchers or off-site faculty, but we also collaborate directly with allied industries to provide unbiased research. Research results are shared with stakeholders and researchers through field days and publications. We also provide a place for the public to interact with agriculture, researchers, and the University of Minnesota.

We are seeking a Research Plot Technician to assist the horticulture program with implementing field trials, maintaining plot or rotational plot areas, collecting data, processing samples and organize seasonal work tasks. The technician will also assist agronomy and soil science researchers at the SROC on similar duties as determined by the supervisor.

Major Areas of Accountability (with percentages):

1) Field plot establishment and maintenance (50%)

- Preparation and layout of field areas to be used for research, or small areas of non-plot rotational crops. Includes measuring, staking, tillage, and herbicide application. Equipment used includes tractor, tractor-drawn cultivation and bed shaping/covering equipment and boom sprayers, backpack sprayers, small handsprayers, and walk-behind tractor with implements.
- Planting operations, including use of large-scale equipment (grain drill, 4-row planter) medium-scale equipment (drop spreader, push seeder), and hand operations (hand-transplanting).
- Plot maintenance, including tractor operations to maintain plot appearance, pesticide application (large- and small-scale), fertilizer application, and handweeding or weeding using hand-driven cultivation equipment or walk-behind tiller. Sprinkler or drip irrigation installation, use, maintenance, and repair.

2) Harvest and data/sample collection and processing (30%)

- Oversee harvest of trials. This includes monitoring plot maturity up to harvest, assisting with harvest and organizing work during harvest and processing operations, and measuring pea yield and quality traits.
- Assist with harvest (by implement or hand) of and data collection from other horticultural research and demonstration plots.
- Collect and process soil and plant samples for on-site or off-site analysis.

3) Equipment maintenance, repair, and calibration (10%)

- Participate in maintenance, repair, and calibration of research and plot equipment.
- Keep non-structural facilities and supplies in operable and orderly condition.

4) Record-keeping and data entry (10%)

- Keep accurate records of field activities and pesticide applications.
- Assign tasks to temp/casual employees.
- Help maintain quality control to meet production and research objectives.

Required Qualifications:

- High school graduate/GED with two (2) years of education and/or experience in horticulture/agronomy or related field.
- A valid Minnesota Driver's License.
- Ability to safely operate, service, and maintain field and large-scale lab equipment.
- Must currently have or acquire a pesticide applicators license.
- Ability to perform essential functions under normal working conditions that include working outside with exposure to weather conditions common to Waseca and in the presence of potential allergens and irritants (with appropriate safety equipment).
- Ability to lift up to 50 pounds.
- Ability to follow written and verbal instructions and keep accurate records.
- Detail-oriented in carrying out research projects.

Preferred Qualifications:

- 4-year Agricultural related degree
- Experience in field plot research and communications
- Experience using Microsoft Excel