

## STATE OF SOUTH DAKOTA CLASS SPECIFICATION

**Class Title: Agricultural Research Manager/Specialist**

**Class Code: 80615**

**Pay Grade: GH**

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### **A. Purpose:**

Performs independent management or specialized responsibilities for one or several areas of an agricultural research project. This would involve implementing and modifying new testing programs; designing computerized crop or livestock data programs and electronic equipment; designing and managing field plot layouts; designing livestock experiments; and making other independent management level decisions to ensure the accuracy and accountability of the project results.

### **B. Distinguishing Feature:**

The Agricultural Research Manager/Specialist is responsible for performing specialized functions or independently managing a major area or areas of an agricultural research project or livestock unit. The incumbent assists or serves as the project leader in one or more of the following areas: planning, supervising, and assigning tasks in such areas as a greenhouse, seed house, livestock unit and/or field operation; developing, maintaining and modifying computer systems and electronic equipment for agricultural research; working with co-operators; and/or performing agricultural laboratory management duties.

Senior Agricultural Research Technician conducts research projects that have been developed by a project leader; designs and conducts research, summarizes the data collected and prepares the final report; and develops new flora or fauna lines and analyzes samples.

The Agricultural Research Technician cares for livestock on a research farm or institution, performs field work, operates feed processing mills, weighs and packages seed for seeding research plots and pollinates and cross pollinates plants; records research data as prescribed by a project leader and prepares, maintains and harvests field research plots.

The Agricultural Foreman serves as a lead worker over senior agricultural research technicians and agricultural research technicians by assigning and reviewing work; feeds and cares for livestock; collects and records research data; repairs and maintains equipment, buildings and grounds; and operates feed processing mills and farm machinery.

The Farm Manager supervises and directs the activities of farm labor personnel at a research station or inmates if a Farm Manager is at a penitentiary.

### **C. Functions:**

*(These are examples only; any one position may not include all of the listed examples nor do the listed examples include all functions that may be found in positions of this class.)*

1. Oversees and manages agricultural operations and research in a specific area/program to ensure the accuracy and accountability of the project.
  - a. Formulates and creates field plot maps and randomizations.
  - b. Initiates and develops crop test trials.
  - c. Manages livestock tests or procedures.
  - d. Determines alterations/modifications to research operations.
  - e. Monitors field and livestock research data and operations and makes recommendations to improve testing results.

- f. Researches new methods or procedures and makes recommendations to enhance the project.
  - g. Provides direction to others within the project.
2. Designs, modifies and maintains agricultural equipment to ensure accurate research data and safe operation.
    - a. Designs and creates electronic equipment.
    - b. Modifies and alters research equipment.
    - c. Calibrates and adjusts equipment to obtain accurate results.
    - d. Investigates, proposes, and develops ways and means to improve efficiencies of agricultural operations.
  3. Develops, operates and maintains computerized research data programs and equipment
    - a. Initiates necessary programs and equipment.
    - b. Formulates changes to increase research effectiveness.
    - c. Designs electronic pathways for interfacing/compatibility with equipment.
    - d. Programs and modify computer systems.
    - e. Identifies and implement new technologies.
  4. Represents the project leader in their particular area of expertise or in the project leader's absence.
    - a. Provides technical assistance to outside entities.
    - b. Conduct tours and provides training opportunities to outside entities.
    - c. Provides work direction to complete assigned tasks.
    - d. Determines research data to be included in the project.
  5. Performs other work as assigned.

**D. Reporting Relationships:**

May supervise or give work direction to Agricultural Research Technicians, graduate students, and/or students. May also provide information and direction to outside entities that are involved in the research project.

**E. Challenges or Problems:**

Challenged to ensure that all program objectives are met in a timely and accurate manner. This is challenging because of the extent to which the incumbent is involved in the research process as well as the changes in the technology of the research techniques. The incumbent is further challenged to design portions of the project; ensure proper maintenance of the test crop, design and modify electronic equipment; develop and alter computerized programs; provide direction to project employees; and make management decisions in the field, seed house, greenhouse, livestock unit or laboratory.

**F. Decision-making Authority:**

Decisions include determining agricultural research layouts; designing, adjusting and calibrating electronic and computerized equipment; determining methods of test crop maintenance; providing advice to outside entities; and designing portions of an agricultural research project.

Decisions referred include contacting other project leaders when problems arise;

deciding if a test trial will or will not be included in a study; purchasing equipment over a set amount; resolving problems that conflict with program procedures or policy; and providing technical advice to outside entities.

**G. Contact with Others:**

Seasonal contacts with seed company representatives, research farm managers, and farm cooperators to provide technical information regarding research projects. Daily contact with project labor to assign work.

**H. Working Conditions:**

Works both indoors and outdoors and is exposed to physical hazards such as extreme weather conditions, agricultural chemicals, and machinery operation.

**I. Knowledge, Skills and Abilities:**

Knowledge of:

- agricultural research methods and procedures;
- procedures and techniques required to analyze laboratory results;
- horticultural, range and/or greenhouse management practices;
- crop and livestock equipment;
- computer programming skills;
- effective methods of supervision.

Ability to:

- communicate information clearly and concisely;
- supervise;
- perform acceptable farming procedures and practices;
- develop laboratory techniques and conduct laboratory analysis and calculations;
- complete accurate records and prepare clear, concise reports.