

DEPARTMENT OF CROP AND SOIL SCIENCES  
*RESEARCH PROFESSIONAL II*  
Job Description

NATURE OF WORK

This position is responsible for overall management of a 525-acre field research laboratory at the Plant Sciences Farm in Oconee County, GA. The position works with 35 to 45 scientists (faculty, staff, post-doctoral associates, and graduate students) in providing experimental plot areas, field research facilities, and field and research equipment support that provides for the accomplishment of a wide range of field experiments primarily in the areas of crop breeding, plant genetics, crop disease management, crop management, plant nutrition, weed management, integrated insect management, and variety evaluation. This position is responsible for annual budget development and budget control for the unit. The position is responsible for supervision of a 3- to 4-member technical staff. The employee must be a professionally competent plant scientist and be capable of remaining current in the various plant science disciplines as they relate to conducting successful plant sciences research. The employee must maintain daily records and provide quarterly and annual reports on environmental parameters, research activities on experimental plots, and budget and sales information for this field research laboratory.

ILLUSTRATIVE EXAMPLES OF WORK

Works with individual scientists in the development of project design, plot-land requirements, equipment needs, Plant Sciences Farm staff requirements, and plan implementation.

Directs purchase of major equipment and annual purchases of fertilizer, pesticides, and planting seed.

Develops annual Plant Sciences Farm budget and provides quarterly status reports to the Department Head and PSF Committee.

Supervises the maintenance of field equipment, major buildings, and a residence.

Ability to develop and implement annual management plan for a 525-acre research field laboratory.

Interviews, hires, trains, and supervises Plant Sciences Farm staff.

Annually evaluates Plant Sciences Farm staff.

Designs and annually updates 4-year cropping plan for research plots at the Plant Sciences Farm.

Supervises collection of soil and nematode samples on nearly 300 plot areas; develops fertility, herbicide, and nematicide plan; and supervises staff in plan implementation.

Maintains detailed budget and daily activity data on the 300 plot areas.

Reports activities to Department Head, Advisory Committee, and participating scientists.

Reviews data on disease development, insect surveys, and makes decisions on the proper action to maintain healthy research plants.

#### DESIRABLE KNOWLEDGE, ABILITIES, AND SKILLS

Extensive knowledge of cultural practices, crop development, crop management, and pest control for the major crops under experimentation (soybean, corn, fescue, alfalfa, cotton, grain sorghum, and wheat).

Extensive knowledge of methods and procedures of field research experimentation.

Ability to assist scientists in the design of their field research studies, provide daily observation, and report results of these observations to cooperating scientists.

Ability to assist in review of existing field plot techniques and provide suggestions to alter or develop improved techniques.

Ability to prepare complete and concise reports on research activities and budgetary status.

Ability to establish and maintain an effective working relationship with 35 to 45 research scientists from several University departments and other units (Crop & Soil Sciences, Plant Pathology, Entomology, Plant Biology, Genetics, USDA-ARS, and Georgia Department of Agriculture).

#### DESIRABLE TRAINING AND EXPERIENCE

Completion of college level work equivalent to a M.S. degree with major course work in an area of crop science, plant science, or a related field in agriculture and experience in field experimentation or a B.S. degree in one of the above areas with considerable experience in field research.

## **Summary of work activity**

### **I. Plant Science Farm security**

The Plant Sciences Farm is made up of a large land area and numerous buildings. There is also a large inventory of equipment and supplies located in a variety of locations on the farm. One of the primary duties of this job is being responsible for knowing the status of these various assets belonging to the farm. In addition, there are also numerous assets belonging to scientists working at the farm that need to be accounted for.

### **II. Plant Science Farm management**

The work day usually starts with management of communications regarding current work requirements at the farm. This is a process that involves many factors that influence decisions concerning what work takes priority that particular day. Weather, crop inputs, personnel, equipment, and time requirements are all factors in determining the daily work schedule. The assignment of work duties is made with the intent of performing the required tasks as accurately as possible and in as efficient a manner as possible.

### **III. Plant Science Farm equipment operation**

Skilled equipment operation as well as basic equipment maintenance is absolutely necessary in performance of work objectives in a cost effective and timely manner.

### **IV. Plant Science Farm maintenance**

The farm requires oversight and maintenance with regard to maintaining all 525 acres of land. There are many miles of access roads and border areas that have to be maintained in addition to the crop production areas. The pond areas and waterways also require attention to insure that they continue to provide the services for which they were designed with regard to water supply and erosion control.

### **V. Plant Science Farm office work**

Record keeping is a vital part of managing the farm. These records provide input necessary for making decisions regarding operations. They also allow reports to be made to all parties with an interest in farm operations. Records are kept with regard to land, expenses, equipment, personnel, and weather data.

