

CROPS TESTING SERIES

Code No.	Class Title	Occ. Area	Work Area	Prob. Period	Effective Date	Last Action
3898	Crops Testing Technician	07	007	6 mo.	11/01/10	Rev.
4653	Crops Testing Specialist	01	007	6 mo.	11/01/10	Rev.

Promotional Line: 258

Series Narrative

Employees in this series perform responsible duties and/or manage land and facilities involved in all aspects of plant sciences research.

DESCRIPTIONS OF LEVELS OF WORK

Level I: Crops Testing Technician **3898**

Employees at this level perform responsible duties for all aspects of plant sciences research. The employees work under general supervision from a designated supervisor.

A Crops Testing Technician typically—

1. assists research staff in planning procedures and performing research activities such as cultivating, pesticide and fertilizer application, pruning, irrigation, and harvesting of crops according to prescribed methods and special procedures at the place of employment and at other specified locations
2. pollinates, inoculates, and grows plants in nutrient solutions, makes delicate transplantations, and performs other tasks requiring technical handling of plants or soils in a greenhouse or nursery
3. records and maintains research data on crop or soil characteristics that requires both numerical accuracy and judgment of crop growth, crop disease, soil, and other relevant characteristics and activities directly affecting research crops
4. prepares seed packets, labels, and tags and arranges and sorts these to correspond to specific plot numbers, spaces, seed types, and row numbers, in order to assure proper planting order and data generation
5. assists in making decisions on appropriate time for planting, cultivating, pollinating, pesticide and fertilizer application, pruning, and harvesting
6. assists in locating and purchasing parts, supplies, and services and obtaining data specifications for the purchase of new equipment
7. maintains and repairs farm and research equipment and maintains all buildings and grounds, including securing building and gates
8. assists researchers and students in the laboratory with tasks such as mixing solutions, preparing media, and grafting

9. assists in the execution of experiments or investigations in crops research and the development of new methods of cropping systems in order to secure more efficient production, higher yields, and improved quality
10. performs other related duties as assigned

Level II: Crops Testing Specialist**4653**

Employees at this level are responsible for the management of land and facilities allocated to research in all aspects of plant sciences. The employees work under general supervision from a designated supervisor.

A Crops Testing Specialist typically--

1. initiates, performs and supervises proper and efficient methods for land and soil preparation, field and plot layout, field and greenhouse seeding, planting and transplanting, pesticide and fertilizer application, mowing, mechanical and chemical weed control, cultivating, pruning, disking, plowing, and mulching
2. independently makes decisions on appropriate time for planting, cultivating, spraying, harvesting and other operations necessary for research trials
3. prepares herbicide and other pesticide spray programs for care and maintenance of experiment station, plot, and land areas
4. is responsible for the repair and maintenance of farm and research equipment, and for the maintenance of building and grounds
5. inspects and monitors research plots and initiates actions to ensure optimum plant growth, which includes pest scouting, initiating management and the safe application of pesticides
6. Performs, teaches and supervises efficient and safe operation of a wide range of field and research equipment
7. executes, as directed, experiments or investigations in crops research and the development of new methods of cropping systems in order to secure more efficient production, higher yields, and improved quality
8. maintains records on equipment maintenance, employment information, and activities directly affecting crops (such as pesticide and fertilizer application, rainfall, harvesting, tillage, etc.)
9. accurately records, maintains and analyzes research data on crop, pest, or soil characteristics that requires knowledge and judgment of crop production
10. assembles, operates, repairs, and dismantles irrigation equipment
11. locates and purchases parts, supplies, and services and obtains data specifications for the purchase of new equipment
12. performs other related duties as assigned

MINIMUM ACCEPTABLE QUALIFICATIONS REQUIRED FOR ENTRY INTO:**Level I: Crops Testing Technician****3898**

CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

1. High school graduation or equivalent
2. a. **Two (2) years (24 months)** of farm experience that required decision making on timing and methods of planting, cultivating, and harvesting

OR

- b. Credit for **24 semester hours** of college course work in crop/horticultural science or a closely related field
3. Possession of a valid State of Illinois driver's license, the class of the license depending on the type of the vehicle(s) to be operated
4. Possession of a pesticide operator's license for crops as applicable to the work assignments of the position to be filled

KNOWLEDGE, SKILLS AND ABILITIES (KSAs)

1. knowledge of crop production and research procedures
2. knowledge of crop planting, cultivation, and harvesting procedures
3. knowledge of principles and processes for providing customer and personal services
4. knowledge of plant and animal organisms, their tissues, cells, functions, interdependencies, and interactions with each other and the environment
5. skills using scientific rules and methods to solve problems
6. ability to use basic computer applications and learn appropriate or specialized software programs as related to the position
7. ability to communicate effectively orally and in writing
8. ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem
9. ability to follow directions and implement research activities and tasks with attention to details, timelines, and accuracy
10. manual dexterity
11. accuracy

CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

1. Any one or any combination of the following, totaling **three (3) years (36 months)**, from the categories below:
 - a. Work experience in crops research or in farm management or closely related field
 - b. Coursework in crop/horticultural science or a closely related field
 - 60 semester hours equals 12 months
 - 90 semester hours equals 24 months
 - 120 semester hours or a Bachelor's Degree equals 36 months
2. **Two (2) years (24 months)** of work experience in agronomy research or in grain farm management that included supervisory responsibilities
3. Possession of a current State of Illinois pesticide applicator's license for crops as applicable to the work assignments of the position to be filled
4. Possession of a valid State of Illinois driver's license, the class of the license depending on the type of the vehicle(s) to be operated

KNOWLEDGE, SKILLS AND ABILITIES (KSAs)

1. knowledge of soil types, textures, and structure and their production potential
2. knowledge of tillage systems, planting methods, cultivation techniques, and irrigation usage
3. knowledge of the use and application of pesticides and herbicides
4. knowledge of the chemical composition, structure, and properties of substances and of the chemical processes and transformations that they undergo
5. knowledge of techniques and equipment for planting, growing, and harvesting of food products for consumption
6. knowledge of principles and methods for describing the features of land, sea, and air masses, including their physical characteristics, locations, interrelationships, and distribution of plant, animal, and human life
7. ability to use intermediate-level computer applications and learn appropriate software or specialized programs as related to the position
8. ability to work independently in the execution of day-to-day duties
9. ability to communicate effectively orally and in writing

10. supervisory ability

11. mechanical skills