

SEED ANALYST

KIND OF WORK

Entry level para-professional/technical laboratory seed analysis work.

NATURE AND PURPOSE

Under general supervision, perform purity analyses and conduct germination tests on seed samples according to prescribed rules and procedures; perform related work as required.

This classification differs from Seed Analyst Senior in that at the Senior level, incumbents provide leadwork direction to the Seed Analysts and Laboratory Technicians working in the Seed Testing Laboratory.

EXAMPLES OF WORK (A position may not include all the work examples given, nor does the list include all that may be assigned.)

Analyze the purity of all kinds of seeds submitted to the seed laboratory so that farmers know the planting value of seed which they intend to use; and so that seed lots to be offered for sale are labeled in accordance with the seed law and seed lots which are on the market are checked for compliance with the seed law by determining percentages of pure seed, weeds, other crop and inert components; identifying and recording the botanical names of all weed seeds and naming other crop seeds; determining numbers per prescribed weight unit of primary and secondary noxious weed seeds present; determining when variety names are stated, if the named variety is covered by the Plant Variety Protection Act and if so indicate on the purity record; and determining and recording any supplemental information.

Analyze the germination of all kinds of seeds submitted to the seed laboratory so that farmers know the planting value of seed which they intend to use; and so that seed lots which are offered for sale are labeled in accordance with the seed law and so that seed lots which are on the market are checked for compliance with the seed law; and so that TZ tests are run and accelerated aging process is completed when requested by identifying, separating and counting portions to be used in germination tests; arranging seed on proper germination media and placing tests in correct growth chambers according to the requirements of the kind of seed being tested; evaluating seedlings at the end of the test period to determine percent germination and hard seed; and determining and recording any supplemental information.

Represent the Department in matters related to seed testing so that the public and the industry are better served and informed by assisting with educational meetings and exhibits of the Department and cooperating agencies, explaining the operations of the seed testing laboratory to groups or individuals visiting or touring the laboratory, and answering telephone inquiries from individuals and seed producers about seed testing, submitting samples, status of tests and the State Seed Law.

Examine the sprouts of germinated seeds for evidence of disease or injury to prevent the spread of plant diseases by the microscopic observation of plant sprouts; by identifying and evaluating the nature of the injury or type of disease; by notifying the leadworker of the presence of disease in the seed sample; and by following appropriate laboratory procedures to prevent the contamination of other seed samples.

KNOWLEDGE, SKILLS AND ABILITIES REQUIRED

Knowledge of:

Seed morphology and seed physiology sufficient to identify pure seed, weeds, other crop, inert components and disease.

Rules and regulations of seed testing sufficient to conduct appropriate purity analyses and germination analyses.

Early growth characteristics of various crops and weedy species sufficient to properly analyze and evaluate the seed's growth potential.

Skill in:

Finger dexterity and eye/hand coordination sufficient to operate seed testing laboratory equipment.

Ability to:

Identify a large number of weed seeds as well as crop seeds sufficient to properly identify and record all samples submitted to the seed laboratory.

Operate laboratory equipment sufficient to properly test for purity and value of seed samples.

Mathematical ability sufficient to determine percentages from weight calculations.

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Rev.: 6-78; 8-91
Merger: 3-68
- 3/68

Former Title(s): Seed Analyst 1 and
Seed Analyst II Merged