

Agricultural Pest Control Specialist

Knowledge, Skill, Ability, and Personal Characteristic Statements Rating Results

K01	General knowledge of all aspects of plant pathology and related fields.
K02	Knowledge of, and experience with sophisticated and complex scientific instrumentation (microscopes, thermalcyclers, centrifuges, robotic liquid handler, etc.) for performing diagnostic tests.
K03	Knowledge of specialized investigative procedures (aseptic technique, immunoassays, PCR, sequence analysis, culture, etc.) and techniques for isolating, identifying, and evaluating plant pathogens.
K04	Knowledge of various literature sources pertaining to plant pathology including databases and scientific journals.
K05	Knowledge of complex interactions between diverse plant hosts and disease causing organisms, abiotic factors in wide-ranging environments.
K06	Knowledge of disease transmission and spread, including insect vectors.
K07	Knowledge of principles and procedures of research planning, designing, methodology, and analysis.
K08	Knowledge of methods of preparation of research reports.
K09	Knowledge of statistical methods and procedures.
K10	Knowledge of data processing techniques.
K11	Knowledge of current nomenclature and diagnostic methods and how these have changed over time including problems associated with historical literature.
K12	Knowledge in an area of specialization (Mycology, Virology, Bacteriology) in plant pathology.
K13	Knowledge of current research literature and trends applicable to the research area.
K14	Knowledge of computer software programs (e.g., Word, Excel, PowerPoint, Outlook, etc.) for data entry, compiling data, statistical analysis, writing reports, and general correspondence.
K15	General knowledge of laboratory safety and handling of hazardous and quarantined material.
K16	Knowledge of general characteristic symptoms caused by plant pathogens (virus, bacteria, fungi, abiotic).
S01	Skill to establish and maintain cooperative working relationships with those contacted during the course of work including effective oral communication in person and via telephone in a courteous, professional manner with a variety of individuals, taking the nature of the audience into account.
S02	Skill to operate a personal computer and software (e.g., Word, Excel, PowerPoint, and Outlook) and/or other computerized equipment in order to perform daily duties.
S03	Skill to operate complex laboratory equipment including microscopes, imaging systems, thermalcyclers, etc.
A01	Ability to perform increasingly complex plant pathological diagnoses.
A02	Ability to and demonstrate professional competence in a specialized area of plant pathology.
A03	Ability to do specialized data analysis for the diagnosis of plant pathogens.
A04	Ability to troubleshoot and resolve inconsistent laboratory test results.
A05	Ability to perform specialized investigative procedures (aseptic technique, immunoassays, PCR, sequence analysis, culture, etc.) and techniques for isolating, identifying, and evaluating plant pathogens.
A06	Ability to perform applied research to optimize existing diagnostic protocols on plant pathogens.
A07	Ability to train laboratory staff, county, Federal, other agency employees, private citizens,

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	and other clientele for sample collection and submission, recognition of symptomatic plants, laboratory techniques, etc.
A08	Ability to perform field surveys for the purpose of positive identification and collection of new or unusual finds.
A09	Ability to make independent diagnostic decisions.
A10	Ability to seek assistance for complex diagnostic determinations.
A11	Ability to assess the political and economic consequences of a diagnostic determination, give preliminary rating, and disseminate results for taking appropriate regulatory action.
A12	Ability to use a personal computer to input data, access information, and/or create materials and documents using a variety of software applications.
A13	Ability to effectively communicate information both orally and in writing, and provide direction in a clear, courteous, professional manner using appropriate tone, vocabulary, and grammar with department staff, the public, and other agencies.
PC01	Willingness to travel to various locations throughout California to perform field work and/or share information with various individuals and groups, formally and informally.
PC02	Willingness to travel out-of-state for training or professional meetings.