

Associate Plant Pathologist (Diagnostician)
Essential Task Rating Results

Task #	Task Statement
1	Diagnoses of plant diseases and identification of plant pathogens which may be detrimental to California agriculture.
2	Evaluation of peer reviewed publications (scientific journals and databases), collaboration with university and government scientists (domestic and foreign) for the purpose of designing and/or using diagnostic methods for disease detection.
3	Perform applied research to optimize existing diagnostic protocols on plant pathogens.
4	Train and provide guidance on laboratory techniques to seasonal employees, laboratory technicians and Environmental Scientists.
5	Isolate and identify causal agents of plant disease in their area of specialization (virology, mycology, bacteriology).
6	Using a computer to compile data on the biology, epidemiology, and economic significance of plant pathogens.
7	Communicate and cooperate in a professional and effective manner with supervisors, management, coworkers, and various state, county and federal agencies, organizations, private citizens, and other clientele on the biology, epidemiology, and economic significance of plant pathogens.
8	Assist in evaluating plant disease problems with homeowners and landscape professionals.
9	Train and provide guidance on laboratory design and protocols to other State and private laboratories within the State of California, which may involve overnight travel.
10	Visit sites of disease outbreaks to collect samples for voucher, analysis and distribution to other research collaborators.
11	Develop and maintain collections of reference cultures, literature, and photographic materials.
12	Perform field surveys for the purpose of positive identification and collection of new or unusual finds.
13	Research application of the scientific method including definition of the nature and scope of the problem.
14	Use scientific methods including Koch's postulates to determine pathogenicity of a microorganism on a potential plant host.
15	Write scientific reports and publications which includes materials and methods, presentation of results, and interpretation and analysis of results.
16	Operate standard office equipment such as copiers, computers, fax machines, calculators, telephones, and other technical equipment.

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17	Based on specialized knowledge and expertise and appropriate test results, document a final official diagnostic determination on a Pest Damage Record (PDR) for each sample received in your area of expertise.
18	Assess the political and economic significance of a diagnostic determination, give preliminary rating, and disseminate results for taking appropriate regulatory action.
19	Retrieve electronic data from various sources (e.g., computer networks, mainframe, email) to store in a secure database.
20	Write letters, memos, e-mails, and other correspondence using word processing and other software for the purpose of communicating and disseminating information.
21	Provide written information to supervisors, co-workers, and subordinates by e-mail, written directions, or notes to communicate information about projects or to address departmental needs.
22	Make scientific presentations to other programs within CDFA, professional societies, grower
	groups, nurseries, arborists, etc. for education and training.
23	Attend trainings and workshops to continue professional development.
24	Proficiency examinations may be given in your area of discipline to be able to perform special United States Department of Agriculture (USDA) projects.
25	Attend professional scientific meetings in the United States or abroad to present results of scientific research, to keep current with scientific advancements in field of expertise, and to foster collaborations with scientist worldwide.
26	Serve as a reviewer of scientific publications in your area of expertise for peer reviewed journals.