

Current  
 Proposed

**California Department of Food and Agriculture  
Plant Pest Diagnostics Center  
Senior Plant Taxonomist  
Duty Statement**

**I. Program/Position Identification**

The Plant Pest Diagnostics Branch (PPDB) of the California Department of Food and Agriculture (CDFA) serves as an official scientific resource, conducting scientific research investigations, providing timely and accurate plant pest diagnostics services, quality control services, and professional expertise to county agricultural commissioners, other state agencies, agri-business and environmental clients within California, nationally and internationally. The PPDB provides a broad range of valuable services to support CDFA's mandate of protecting agriculture and the environment. The laboratory provides diagnostic support to CDFA's pest exclusion and eradication programs in their tasks of identifying and combating invasive plants, and plant pests and diseases that threaten California agriculture and the environment. The laboratory also provides diagnostic support to the United States Forest Service and other federal agencies in the detection and monitoring of invasive and destructive plants, and plant diseases and pests

Under the general administrative direction of the Environmental Program Manager I, the Senior Plant Taxonomist is responsible for providing timely and accurate identification of plants of real or potential agricultural and environmental significance, providing expert scientific consultation, keeping abreast of scientific advancements and participating in scientific meetings, and conducting original scientific research in botany and plant taxonomy.

**Classification: Senior Plant Taxonomist**

**Working Title: Senior Plant Taxonomist**

**License or Other Requirement:**

**Position Number: 014-623-0486-001**

**Division/Branch/DAA: PHPPS / PPDB**

**Location: 3294 Meadowview Rd., Sacramento**

**Date Prepared: November 2024**

**Work Hours/Shift: 40 hours/week, Monday – Friday**

**II. Essential and Non-Essential Job Functions**

**A. Essential Functions:**

**Function #1: Botanical Diagnostics**

**40%**

- Examine and identify plant specimens including plant parts and propagules submitted to the laboratory by CDFA border inspection stations, various CDFA Programs, County Commissioners, Universities, and other state/federal/county agencies for the purpose of identifying new invasive species to California's agriculture and native environment, including plants unknown to be present in California and of known or unknown pest significance using morphological and molecular-based techniques.
- Serve as a scientific information resource for the CDFA, the County Departments of Agriculture, USDA, and other stakeholders of the Department by providing scientific botanical information that factors into the scientific evaluation of a plant's potential or significance as an agricultural or environmental pest, and as a result, for the enforcement of quarantine regulations of the Food and Agricultural Code.
- Perform taxonomic research, to resolve critical identification and nomenclatural problems of foreign or domestic weed pests to prevent accidental introduction of certain plants into California or the underestimation of their potential as a pest because of misidentification or confusion of their identity with closely related species.
- Make or obtain voucher specimens and associated literature for weed pests, for the purpose of improving the usefulness of diagnostic tools, the CDA herbarium and Botany reference collection.
- Provide timely information on plant identification and biology, including scientific and taxonomic information, weedy/invasive characteristics, geographic distribution, and its known or potential impact to the environment and agriculture to clients and agencies to prevent inadvertent introduction or spread of invasive plant pests.
- Write pest risk assessments of noxious weeds listed in 3 CCR Section 4500 noxious weed list and other plant species for review and finalization by the Primary State Botanist.
- Maintain a database of CDA herbarium on the CDFA internal network. Oversee and ensure the accuracy of data entered in the CDA herbarium database as well as the Department's Pest and Damage Records (PDR) database.
- Prepare technical scientific botanical reports as needed to ensure adequate communication of critical weed pest information to the CDFA and other clients.

**Function #2: Curation**

**25%**

- Working independently, using a high degree of knowledge of plant taxonomy, plant anatomy, seed and plant biology, and molecular diagnostics the Senior Plant Taxonomist collects and identifies specimens for the herbarium, monitors quality control of the herbarium, ensuring accuracy of identifications, as well as proper categorizing and filing of reference specimens in order to expand and improve the value of the herbarium as a diagnostic and identification tool.
- Coordinate the exchange of scientific herbarium specimens for the exchange program, and develop methods for other scientists to access information pertaining to the collection contents, including methods involving the California Consortium of Herbaria (of which the CDFA herbarium is a part) to ensure adequate communication and collaboration with other botanists in the joint effort of identifying plants that are a known or potential threat to California agriculture, forestry, and the California environment.
- Oversee and ensure the accuracy of CDFA herbarium data entered into the California Consortium database to ensure a high degree of accuracy, while maintaining

confidentiality in the data that becomes accessible to CDFA and other botanists who identify weeds of significance to California Agriculture.

**Function #3: Research and Training**

**25%**

- Working independently, the Senior Plant Taxonomist designs and implements a research program that results in improved diagnostic capabilities in the Botany Laboratory, including the use of molecular tools for plant identification at the DNA level.
- Prepare training materials and lectures for university- and industry-sponsored seminars; train laboratory employees, border station and other CDFA personnel, student interns and seasonal employees, County Department of Agriculture employees, and other stakeholders in sample collection and rudimentary plant identification or categorization to ensure a high quality of sample collection which would facilitate more accurate and expeditious plant and weed identification.
- Attend workshops and professional botanical meetings as needed and approved to represent CDFA's professional and scientific interests at said meetings, and to adequately communicate and network with other botanists who also identify or research plants and weeds of pest significance to California Agriculture.
- Collaborate with other systematic botanists nationally and internationally to keep abreast of professional changes and developments in plant systematics that would facilitate effective systematic research, and to exchange/gather relevant data that would aid in the identification of pest weeds.

**Function #4: Field Work**

**5%**

- Observe invasive and other important plant taxa and their populations in the field, to assess biological characters that must be factored into regulatory decisions such as impact on agriculture, weediness, hardiness, survivability, as well as methods and likelihood of propagation and spread in California's environment.
- Collect said specimens for study, for the CDFA herbarium, and for scientific collaboration via the international and national exchange programs to expand and improve the usefulness and value of the PPDB herbarium as a diagnostic tool.

**B. Non-Essential Functions:**

**Function #1: Miscellaneous Duties**

**5%**

- Perform other job-related duties as requested by supervisor.

**III. Work Environment**

The incumbent works in the Botany laboratory in the PPDC in the CDFA Meadowview complex, Sacramento. The lab consists of two offices and one science laboratory which contain specialized scientific equipment such as microscopes. The extensive botanical herbarium houses plant specimens from all 58 California Counties. Individual labs are equipped with one built-in standing height counter and sink with eyewash, wall-mounted

bookshelves, and assorted tables and desks to accommodate microscopes and other magnification equipment, fiber optic lights and computers.

The Plant Pest Diagnostics Center also houses four other scientific laboratories (Entomology, Nematology, Plant Pathology, and Seed Botany). Safety features include emergency showers and first aid kits in every hallway, and eyewash stations and fire extinguishers in every room. Shared facilities among all five labs include conference rooms, special project rooms, a multi-room DNA laboratory (with standard equipment and supplies including ultra-low freezers, micropipettors, thermocyclers, gel documentation system, transilluminators, etc.), an electron microscopy suite (SEM and TEM), a macrophotography station, a literature reference library, a packing and receiving area, and various freezers and refrigerators, and several storage and cold storage rooms.

#### IV. Employee's Statement

##### (Initial applicable statement)

\_\_\_\_\_ I have read and understand the duties and essential functions of the position. I understand Reasonable Accommodation<sup>1</sup> and how it applies to essential functions. I can perform the duties of this job without Reasonable Accommodation.

**OR**

\_\_\_\_\_ I have read and understand the duties and essential functions of the position. I understand Reasonable Accommodation<sup>1</sup> and how it applies to essential functions. I will need Reasonable Accommodation to perform one or more of the essential functions described in this duty statement.

\_\_\_\_\_  
Employee Signature<sup>2</sup>                      Date

\_\_\_\_\_  
Supervisor Signature                      Date

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Print Name

**CC: Employee  
Official Personnel File  
Supervisor's Drop File**

<sup>1</sup> A reasonable accommodation is an adjustment or modification to a job or workplace that allows qualified employees or prospective employees to perform the essential functions of the job successfully.

<sup>2</sup> Duties of this position are subject to change and may be revised as needed or required. If/when duties change you will be provided a revised duty statement to sign.