

Senior Insect Biosystematists (Specialist)

Department of Food and Agriculture

Essential Tasks Rating Results

1	Provides accurate and timely identification of insects and other arthropods, as well as mollusks and other invertebrates, which may be actual or potential pests of California agriculture and the environment. To do so, incumbent receives, evaluates, and identifies submitted specimens.
2	Perform in a back-up capacity for other insect and invertebrate groups as necessary and appropriate, depending on familiarity or training received.
3	Identifies digital images of specimens.
4	Studies various groups of arthropods including pest groups, contributing to the discovery and description of new species, and development of identification tools.
5	Provide expert scientific consultation to internal and external clients. These include the Department of Food and Agriculture, the County Agricultural Commissioners, the USDA, state universities/colleges, U.C. Cooperative Extension, the agricultural industry, the public, and other clientele.
6	Works with other scientists in the lab, especially involving emergency projects.
7	Interfaces with scientists from the USDA to solve complex pest-related taxonomic problems and to assist with problems at the federal level.
8	Develops/utilizes new diagnostic technologies.
9	Participates in collaborative research projects with other scientists (e.g., insect biology, taxonomy, systematics), which may include preparing grant applications for external funds when appropriate.
10	Contributes and curates the reference collection (California State Collection of Arthropods).
11	Evaluates and makes recommendations on pest issues pertaining to appropriate groups, such as pest ratings, etc.
12	Conducts independent research to answer questions and solve problems in taxonomy, diagnostics, morphology, nomenclature, systematics, etc., in the incumbent's area of expertise.
13	Publishes results from scientific research or opinions in peer-reviewed scientific journals, books, or other publication outlets.
14	Presents analyses and results of scientific research or investigations to colleagues and other scientists at professional meetings, conferences, and technical working groups.
15	Conducts field work to build the resource base of arthropod specimens of both native and foreign origin.
16	Maintains professional contacts with scientific colleagues throughout the world.
17	Reads and analyzes scientific publications related to assigned responsibilities, keeping abreast of advances relative to diagnostics.
18	Participates in various professional meetings and societies including involvement in committees and working groups in areas of expertise.

19	Serves on expert panels in area of expertise, including federal panels related to invasive insects and other invertebrates.
20	Gives professional training sessions or workshops for scientists, state and county personnel, international collaborators, scientists from other states, universities, or other clientele.
21	Acts as expert witness in court cases, as appropriate.
22	Gives training to internal staff in specialized techniques essential to the position, as appropriate.