The UC Davis Department of Plant Sciences is seeking a motivated Junior Specialist to work in the Grain Cropping Systems Lab under the direction of CE Specialist Mark Lundy. The individual will be based on the UC Davis campus and will perform agronomic research on farmer fields and research stations located across the state of California. They will provide assistance on industry collaborative research and extension projects in grain cropping systems and provide general assistance to the lab group. Position will require work with various types of grain and forage crops in field settings, and will also involve conducting laboratory research and general laboratory duties related to soil and plant nutrient analysis. Current research projects include relating high-throughput phenotypic measurements recorded at the field scale to crop performance under diverse growing environments, developing a quantitative understanding of genotypeXenvironmentXmanagement interactions in California grain crops, and creating innovative and dynamic extension education content for California growers. The Junior Specialists will report to the Principal Investigator and work closely with graduate students, undergraduate students and other academics in the lab. Responsibilities will include planting, maintaining and harvesting agronomic grain trials using research-scale farm machinery, monitoring and measuring the plant-soil environment using a mix of traditional and novel agronomic methodologies, performing laboratory analysis on plant and soil material, and assisting in the summary and presentation of data to academic and extension audiences. The successful candidates will be actively involved in publishable research activities including participation in discussions on research and the interpretation of research results as well as participating in outreach activities and appropriate acknowledgement in publications. Applicants are expected to have an interest in and experience in agronomy, agroecology and farm management.

Research (90%):
• Implement multi-location agronomic experiments and collect physical and digital observations of the plant-soil environment throughout the growing season.
• Develop templates and protocols for data entry, and organize and maintain file structures for the various sources of data collected by the lab group.
• Summarize field data. Produce graphical, tabular and written summaries of the experimental data to be presented to stakeholders in writing, web and oral form. Maintain and update the web-based portals of information produced by the project, and prepare reports.
• Follow and, when appropriate, develop and/or revise protocols for tests and procedures related to the use of field measurement devices and tools.
• Operate and maintain an inventory of equipment and disposables used in field research. Maintain the laboratory environment in a safe and organized manner, including keeping inventories of key equipment, chemicals, and disposables.

The research will enable the candidates to be significantly involved in publishable research, with acknowledgment in publications.

Professional Competence (5%):
• Attend seminars on topics related to fields of interest.
• Participate in scientific discussions with peers to enhance knowledge and confidence.
• Participate in training programs to enhance skills

University and Public Service (5%):
• The candidates will also participate in activities of committees with the Plant Sciences Department, college, campus and other university entities as appropriate.

QUALIFICATIONS: Bachelor’s degree in Agronomy, Plant Sciences, Agroecology, Sustainable Agriculture, Soil Sciences, Environmental Sciences, or a related field. Demonstrated interest or experience in plant production systems. Ability to organize and process data (programming experience in R or advanced abilities in Excel are a plus). Applicants must show attention to detail, be willing to maintain a flexible schedule and able to regularly lift a 50-pound weight. Must have a valid California driver’s license and be able to take field trips that will require
overnight stays. Must be able to communicate proficiently in English, both in writing and orally. Bilingual in Spanish is a plus.

ADDITIONAL QUALIFICATIONS:
• Experience with agronomic and/or environmental research
• Experience with farm machinery and/or field-scale research machinery
• Familiarity with plant-soil sampling and analysis
• Familiarity with basic laboratory concepts.
• Familiarity with or experience in an academic research environment.
• Familiarity with standard software (Excel, R, PowerPoint, Microsoft Word)