**Area CE Agronomy and Weed Management Advisor**

**serving Merced, Stanislaus, and San Joaquin Counties**

**Position**
The Area Cooperative Extension advisor for agronomy and weed management will develop an extension, education, and research program that addresses grower and industry needs, including variety evaluation, soil and fertilizer management, irrigation, and integrated weed management programs to optimize agronomic cropping systems in Merced, Stanislaus, and San Joaquin Counties. Primary crops include irrigated forage and silage crops, cotton, small grains, dry beans, corn, and alfalfa. The general focus of the agronomic work will be on soil salinity, soil fertility and plant nutrition (including use of dairy manure), irrigation management, improved varieties, pest management (weeds, insects, and disease) and economics. The focus on weed science will address emerging issues with herbicide evaluation, general weed management, mechanical/autonomous weed management and herbicide resistant crops and weeds both within crop seasons and as part of a multi-year rotation of various agronomic crops. Key clientele includes growers, farm managers, PCAs, allied industry, and UC farm advisors and Specialists.

**Education and professional requirements:** MSc degree in disciplines such as plant science, agronomy, pest management, and crop production with specific emphasis on weed science. Excellent written, oral, and interpersonal communications skills are required, and a demonstrated ability in applied agriculture research and extension preferred.

The CE advisor is administratively responsible to the UCCE Merced County Director with input from the County Director of Stanislaus and San Joaquin Counties. This advisor will address core concerns of the Sustainable Food Systems, Water Quality, Quantity, and Security, and Endemic and Invasive Pests and Diseases ANR strategic initiatives.

**Justification:**
The Merced – Stanislaus area has been without an agronomic farm advisor for many years. Merced briefly had a new agronomy advisor in 2018 (Lynn Soznoskie) and 2021 (Jose Dias), both of whom were well received and appreciated during their short tenure. Combined acreage for field crops in Merced, Stanislaus, and San Joaquin counties exceeds 1.9 million acres, with value over $700 million annually. Additionally, many of these crops are feed and forage crops that support the local dairy industry. In these counties, milk is ranked in the top three most valuable commodities, with combined value of over $2 billion annually. The area agronomy advisor will serve and support the agronomic crops industries of these counties, particularly the feed and forage crops that support the local dairy industry, and soil fertility and nutrient management including the use of dairy manure. Merced continues to participate in the cotton variety trials through the help of Specialist Bob Hutmacher and farm advisor emeritus Bill Weir. Cotton continues to be a major crop in the area – acreage and value in 2020 were estimated at 23,500 and $43.5 million, respectively.

There are many weed management issues currently facing California agriculture, including herbicide resistant weeds, formulation changes to meet new regulatory standards, organic and sustainable weed management programs, and robotic/precision cultivators. Previous retirements and vacancies have left UCCE with no agronomic weed management advisors in the northern San Joaquin Valley.

**Extension:**
The advisor will work with a diverse group of people to provide local leadership in planning and developing educational programs to address the needs of clientele and develop an ongoing extension education program using a mix of traditional and emerging outreach tools, including individual consultations, field days, tours,
meetings, web conferences, ANR publications, peer-reviewed journals, online learning, web content systems and repositories, social media, and specialized and public media outlets appropriate to the clients. Key clientele groups include the California Cotton and Ginners Association, CA Alfalfa and Forage Association, the CA Wheat Commission, and the crop protection industry.

Research:
The advisor will provide local leadership for planning, coordinating, and conducting applied research activities on topics such as pest management (with a specific focus on weed ecology and sustainable weed management in agronomic cropping systems, including but not limited to herbicide resistant weeds, managing weeds in herbicide resistant crops, and robotic weed control equipment), nutrient management (particularly nitrogen and plant nutrients from dairy manure), irrigation management, variety evaluation, and economic impacts. The academic in this position will be expected to interact with UC ANR Program Teams, Specialists, Advisors and others to develop, strengthen and expand the local delivery of statewide programs.

ANR Network: The advisor will collaborate with the UC ANR Agronomic Crops and Pest Management Program Teams and affiliated Workgroups. Potential colleagues include ‘in-house’ dairy, soil health, and Delta crops advisors. This cohort will continue to work with campus specialists to advance the statewide goals of Cooperative Extension in the northern San Joaquin Valley.

Network External to ANR: USDA ARS facility near Parlier welcomes collaborations with UCCE, CA Weed Science Society, CA Plant and Soil Conference, American Society of Agronomy, and research and development professionals in the agriculture chemical industry. The East San Joaquin Water Quality Coalition has also expressed interest in working with a person in this position to strengthen nitrogen management research in agronomic crops in the region.

Support: The County of Merced historically provides good support for our programs. Merced County support for advisors includes an office, county vehicles, warehouse storage, an agriculture field technician, funding for a summer student intern, and clerical office staff.

Other support: An assortment of commodity boards and organizations fund projects, including but not limited to the CA Cotton Ginners and Growers Association, CA Wheat Commission, CA Dry Beans Advisory Board, and the CA Alfalfa and Forage Association, CA DPR Pest Management Alliance/IPM program, and the Western IPM and Western SARE grant opportunities. California Dept of Food and Agriculture has a fertilizer research grant program (FREP) that also serves as a funding source for agronomic projects and promotes healthy soils programs and grants. This position was identified as the main priority by UC ANR’s Agronomy Program Team, and ranked highly among Pest Management Program Team members during the position call process in 2021. The Agronomy Program Team’s recent statewide needs assessment survey also identified weed management as a top priority of the agronomic crops industry in CA (Kanter et al., 2021, in production: DOI: 10.1002/agj2.20897).

Headquarters and Coverage Area: Merced County UCCE. Because of the size and concentration of the dairy industry in the area, Merced is a major production area for forage crops, and while cotton acreage is declining in much of the state, Merced County continues as a major cotton growing area.

Developed and proposed by: Scott Stoddard, Merced County Director
Program Team support and input: Nicholas Clark (Tulare, Kings & Fresno Counties & Agronomy PT co-chair); Michelle Leinfelder-Miles (San Joaquin County), Jennifer Heguy (Stanislaus County Director); Brent Holtz (San Joaquin County Director); and Tom Getts (Lassen & Modoc Counties and UC ANR Weed Workgroup).