**Entomology Advisor, Imperial County**

**Position Title:** Entomology Advisor, with emphases on development and delivery of arthropod pest management knowledge, practice and implementation in field, row and vegetable crops.

**Position:** This position will continue to build and support arthropod pest management in field, row and vegetable crops in the Imperial Valley. The position requires a minimum of a M.S. in entomology or a closely related field (Arthropod IPM, concentration in insect/mite management). A PhD is preferred with experience in arthropod pest management. Leadership skills in coordinating widely dispersed projects in field, row and vegetable crops is required. It will support and be supported by county based advisors, link to campus specialists and Agricultural Experiment Station scientists.

**Justification:** In support of UC ANR’s Strategic Plan, this position will develop and delivery of regional programs which benefit Californians with healthy, nutritious food and fiber supply while protecting them and their environment. Imperial County has a long history of arthropod pest management issues in a wide range of row, field and vegetable crops including seed alfalfa, wheat, silage, sugar beets, sugar cane, carrots, onion/garlic, leafy vegetables, melons, broccoli and feeds for diary that occupy a large foot print in this region. These cropping systems vary from multi-month to multiple year plantings and are important in the food, feed and fiber production system of CA, the nation and the world. Pesticides continue to be a primary input for pest management in these crops but environmental and human health issues, including surface on ground water contamination, food safety and risks to pollinators and bystanders during pesticide application are becoming more important factors. Imperial County lies on the border between the United States and Mexico. Invasive insects and plants are an ongoing issue that continues to plague California agriculture. Currently there are only 2 advisors with responsibility for arthropod pest management in all of Southern California with personal in Riverside and Imperial County UCCE.

**Extension:** Develop, maintain and coordinate programs;

Deliver through local CE infrastructure, system based UC information using various educational approaches to learning styles, e.g. lectures, social media, experiential and individual consultations. Provide leadership and expertise to local CE Advisors, industry, and PCAs to enhance arthropod pest management in row, field and vegetable crops. Key stakeholders include members of: Crop Protection Industry, CA Melon Research Board, CA Alfalfa and Forage Association, CA Alfalfa seed producers, California Specialty Crop Council, California Agricultural Production Consultants Associations, Pesticide Applicators Professional Association, USDA. APHIS, ARS, Cal & US EPA, Agricultural Commissioner’s Office, California Department Pesticide Regulation

**Research:** While working with existing research/extension teams or by building new ones, the Entomology Advisor will assess and improve arthropod management programs for invertebrate pest populations, for example:

* Stink and plant bugs (broccoli, leafy greens)
* Leaf hopper and thrips vectoring diseases (mixed melons, sugar beet)
* Armyworm and other lepidopterans pests ( alfalfa, lettuce)
* Whiteflies vectoring diseases (mixed melons)

The Entomology Advisor will also respond to endemic and invasive threats by developing immediate and long term programs (for example, the endemic brown stink bug, the invasive Brown Marmorated stink and Bagrada bugs). He or she will provide demonstration research to:

* Compare and contrast chemical and non-chemical controls
* Compare and contrast integrated vs. single control approaches

The successful candidate will publish in outlets appropriate to the audience and situation including peer-reviewed journals, technical magazines and reports, social media, blogs and local media

**ANR Network:**

Arthropod Pest Management

UCD –Extension Entomologist being proposed, UCR – Trumble, Daugherty, Millar, UCCE Riverside – Michael D Rethwisch, UCCE Kern -David Haviland, UCCE San Luis Obispo – Dara, UCCE KARE – Tollerup, UCCE Merced - Jhalendra Rijal

**Network External:**

Industry: CA Alfalfa and Forage Association, California Specialty Crop Council, CAPCA, Crop Protection Industry

Public: Ag Commissioners, CDPR (state/regional), USDA ARS & NRCS, CDFA

USDA NRCS

**Support:** Imperial County UCCE provides a vehicle for on the job transportation to field visits, research projects and educational activities. The advisor is provided an office, telephone, cell phone, high speed wireless internet access, storage space, furnished shared laboratory, an autoclave, clean room, sample and media refrigerators, clean bench, a dissecting and a compound microscope, a camera for field photography and one camera fixed to the compound microscope, spray equipment, county trust fund, office supplies, clerical and administrative support.

**Other support**: Commodity and industry grants, CDPR Pest Management Alliance/IPM program, Crop protection industry grant & aid, CDFA Specialty Block Grant

**Location:** The position will be housed at Imperial County CE office and serve Imperial County. The CE office in Imperial is located at the Desert REC. Desert REC has laboratories and facilities to conduct applied research and opportunities to collaborate with campus based colleagues on existing and new projects at DREC. This location will enable a new advisor with immediate access opportunities for collaboration.

**Developed and proposed by:** The Imperial County Director is putting the position forward with consultation from the county directors, program teams and work groups. This position was identified as a priority by the UCCE – CD meeting in February 2018, UC ANR’s Entomology Work Group, Pest Management Program Team, Vegetable Crops team, and the Desert workgroup, during the April 2-12, 2018 UCANR statewide conference. These groups, composed of UCCE Advisors and Specialists and AES faculty, considered this position as vital for continued function of UC’s extension continuum. Stakeholders involved; local advisors, DREC Director, and Imperial, Riverside, and San Diego County Directors.