TITLE: Area Integrated Pest Management Advisor-Central Sierra MCP

DESCRIPTION: The Area Integrated Pest Management (IPM) Advisor for the Central Sierra MCP will implement a dynamic applied research and extension outreach program addressing sustainable management for a wide range of pests, diseases and abiotic plant disorders affecting the diverse small farm cropping systems and associated grower communities found within the Central Sierra MCP.

The disciplinary focus of this position is Integrated Pest Management with a goal to secure and enhance local farm productivity while safeguarding environmental and community health. The position will focus on three programmatic themes: (1) Enhancing farm economic productivity by identifying cost effective IPM solutions for endemic pests, as well as, new invasive pests attacking a broad range of crops grown in the region including wine grapes, tree fruit, Christmas trees, vegetables and olives; (2) Developing awareness and targeting solutions to address climate change effects on changing and/or emerging pest complexes and abiotic stressors of plant growth, including drought, heat, and frost events; (3) Securing environmental and community health via adoption and implementation of IPM programs that minimize pesticide use and pesticide movement into farm adjacent waterways, forest lands and urban communities including schools.

A minimum of a master’s degree in an IPM related field such as entomology, plant pathology, weed science, or vertebrate pest management is required. Experience conducting field work with small farmers on IPM implementation highly desirable. Bilingual in Spanish desirable.

JUSTIFICATION: The geographically diverse Central Sierra MCP region borders the eastern edge of the San Joaquin Valley extending to the California-Nevada border, which serves as a potential gateway for an increasing number of invasive pest threats. Arable farmlands lay from approx. 800 feet to 3,400 feet in elevation and encompass a large diversity of soils, topographies and microclimates affecting the pest complexes encountered. Future climate change may increase the likelihood of new pest establishment where currently key pests in other CA. regions (i.e. Pierce’s disease, vine mealybug) do not yet exist here. The majority of agriculture is on small farms, often less than 20 acres in size, commonly with an agritourism or direct marketing component. Proximity of farms to sensitive forest lands increases interactions with wildlife (i.e. bear) as unique pest problems. According to the 2019-2020 crop reports, combined fruit and nut production within the region was valued at over $61 million. However, El Dorado county estimated the actual impact of agriculture to the economy at $703 million due to the heavy influence of agritourism in the region. There are few private Pest Control Advisors or consultants working within the region to improve productivity and those that are often come from other parts of the state where pests or conditions greatly differ. These farms need a local, unbiased source of reliable pest management information.

The advisor would serve a variety of clientele, including but not limited to: commercial wine grape growers (approx. 9,000 acres); tree fruit producers (apples, peaches, pears); new, inexperienced landowners such as retirees wishing to develop their property; a growing number of organic vegetable
producers, often marketing directly at Farmer’s markets, CSAs or truck farms; Christmas tree producers, a lucrative crop for the region that has few resources within ANR; and the five Master Gardener programs in the region serving home horticulture.

**EXTENSION:** The advisor is responsible for the development, implementation, and evaluation of IPM extension education programs that will have positive impacts on foothill farm economic security and help to safeguard water resources and community health. The position will assist agricultural producers, including underserved groups such as Miwok Native Americans and Latino farm workers, consultants, local county agricultural commissioners, UCCE Master Gardeners and home horticulturalists by developing and extending science-based IPM practices.

**RESEARCH:** The candidate would address emerging invasive and endemic pest issues within the context of the unique Central Sierra environmental conditions. Conducting research to answer questions on pest host range, generation time, natural enemies, alternative management practices, effective pesticide strategies and application timing and technology.

**ANR NETWORK:** The advisor will work with UC ANR networks that encompass IPM disciplines, including the UCIPM Statewide Program, the Pest Management Program Team, Foundation Plant Services, Master Gardener network. The advisor will work closely with the newly hired Local Food Systems Advisor serving the same region. This position will also be supported by CE specialists in campus based Entomology and Plant Pathology departments.

**EXTERNAL NETWORK:** The advisor will work with local grower groups, including Farms of Amador, Farms of Tuolumne, El Dorado Grape Growers, Amador Winegrowers, Calaveras Wine Alliance, CalaverasGrown, and Apple Hill Growers Association. The advisor will work with the local NRCS, Community Alliance with Family Farmers (CAFF), RCD, Farm Bureau, and county agricultural commissioners.

**SUPPORT:** The advisor will be provided with an office, telephone, internet, office supplies, clerical and administrative support, access to a vehicle, and travel support.

**OTHER SUPPORT:** It is expected that research support will come from competitive grants in collaboration with partnering organizations and ANR colleagues, as well as grants from Western Sustainable Agriculture Research and Education, DPR Pest Management Alliance Program, and local community groups.

**HEADQUARTERS AND COVERAGE AREA:** The advisor will be housed in the Central Sierra MCP, Placerville office. Although the geographic responsibility consists of four counties, it is only a 2-hour drive to reach the opposite end of the assigned area.

**DEVELOPED AND PROPOSED BY:** Lynn Wunderlich (Central Sierra Farm Advisor), Jim Farrar (UCIPM director), JoLynn Miller (Central Sierra MCP Director), with input from Scott Oneto (Central Sierra Farm Advisor).