# UC Davis Cannabis Research Initiative

## Resource

#### Growing

**UC Nursery and Floriculture Alliance.** The University of California (UC) provides educational programs and science-based information for the ornamental industry in California. There are workshops and conferences that educate nursery and greenhouse operations on best practices for managing pest and diseases, fertilization, chemical application and irrigation for production industries in California that produce greenhouse crops. To find educational opportunities, check this page to see past and upcoming <u>workshops and conferences</u>. UCNFA also publishes a quarterly <u>e-newsletter</u> which features articles from UC state and county experts.

**Pest and Disease Management.** <u>UC Integrated Pest Management</u> maintains a website focusing on the identification and control information for insects, diseases, and weeds for agriculture and nursery production. On the UC IPM website, growers can find principles and practices for issues relevant to pest and disease management.

**Irrigation Management.** UC professionals have produced two books detailing the easiest way to implement management practices in small to medium-sized nurseries that protect against runoff and leaching of fertilizers, pesticides, and other chemicals used in producing crops. "Best Management Practices; A Water Quality Field Guide for Nurseries" can be found online. A hard copy of "Greenhouse and Nursery Management Practices to Protect Water Quality" is available for purchase on the <u>UC website</u>.

**Weeds.** The <u>Weed Research Information Center at UC Davis</u> provides weed identification and control information in addition to their annual Weed Day workshop and online resources.

**Container Nursery Management.** UC has developed "Container Nursery Production and Business Management Manual" that serves as a valuable resource for those involved in California's nursery production industry that includes basic and research-based information on all aspects of the productions of landscape plants in commercial nurseries. The book is available for purchase on the <u>UC website</u>.

**Economics.** Dr. Daniel Sumner, Agricultural Issues Center at UC Davis, has presented on the "<u>Economics of Cannabis and Demand for Farm Labor</u>" outlining the challenges of labor available competition for agricultural farm labor.

**Education.** The UC Davis Western Center for Agriculture Health and Safety is offering a class during one of their Monthly Seminar Series called "Cannabis and Farmworker Health and Safety" on Monday March 5<sup>th</sup>, 2018. The seminar is free for the public to attend. For more information, find the event page <a href="here">here</a>.

#### **UC Research Advisory**

**Effect of 2018 Farm Bill on Hemp Research –** With the passage of the Agricultural Improvement Act of 20181 (known as the "2018 Farm Bill"), may university researchers legally grow the variety of cannabis known as industrial hemp and use hemp and hemp derivatives in their research without obtaining a Schedule I controlled substances registration from the federal Drug Enforcement Administration (DEA)? Find out more <a href="here">here</a>

The Center for Medicinal Cannabis Research (CMCR) is seeking to fund primary and pilot cannabis-related studies that further enhance the understanding of the efficacy and adverse effects of cannabis and cannabinoids as pharmacological agents for the treatment of medical and psychiatric disorders, and their potential public health impacts. Primary project awards will be up to \$825,000 in total costs (\$275,000 per year) for up to three years. Pilot awards will be up to \$300,000 for two years (up to \$165,000 in Year 1 and \$135,000 in Year 2). Priority will be given to proposals addressing issues identified under Funding Priorities. Find out more <a href="here">here</a>

#### Postharvest and Food Safety

**Postharvest.** The Postharvest Center at UC Davis provides science-based information resulting in reduced losses and improved quality, safety, and marketability of fresh horticultural products. They have produced "Small-Scale Postharvest Handling Practices: A Manual for Horticultural Crops" which can be found <a href="here">here</a>.

**Food Safety.** <u>UC Davis Food Safety</u> provides links to presentations, publications, and other websites with information related to the production, harvest, and processing of foods.

### California Regulation

**Cultivation.** Directed by the Department of Food and Agriculture, <u>CalCannabis Cultivation</u> <u>Licensing</u> is creating proposed regulations to establish cannabis cultivation licensing to record the movement of cannabis products through the supply chain. CalCannabis is preparing to accept applications for cultivation licenses beginning *January 1, 2018*.

**Manufacturing.** Directed by the Department of Public Health, <u>Manufactured Cannabis Safety</u>
<u>Branch</u> licenses manufacturers of cannabis products, such as edibles.

**Distribution, Testing, Dispensary and Microbusiness.** Housed within the Department of Consumer Affairs, the <u>Bureau of Cannabis Control</u> licenses testing labs, distributors, dispensaries, and microbusinesses.

**Industrial Hemp Program.** The Department of Food and Agriculture is developing a program to administer the authorization of commercial production of industrial hemp in California. More information on registration process, regulations and other administrative details can be found on the California Industrial Hemp Program website.

#### **Cannabis Articles**

Marijuana's New Crop of Consumers, by the Numbers <a href="https://www.nytimes.com/2019/01/24/us/california-today-marijuana-consumers-by-the-numbers.html">https://www.nytimes.com/2019/01/24/us/california-today-marijuana-consumers-by-the-numbers.html</a>

Exploring the Mechanisms Underlying Analgesic Properties of Minor Cannabinoids and Terpenes (R01 Clinical Trial Optional) <a href="https://grants.nih.gov/grants/guide/rfa-files/rfa-at-19-008.html">https://grants.nih.gov/grants/guide/rfa-files/rfa-at-19-008.html</a>

Canada's Grand Cannabis Experiment Has Set Scientists Free

https://www.nytimes.com/2018/11/20/opinion/cannabis-science-legal-marijuanacanada.html

Francis Ford Coppola Launches Cannabis Product

https://www.winebusiness.com/news/?go=getArticle&dataid=205390

McConnell says hemp provision will be in farm bill

https://www.morningagclips.com/mcconnell-says-hemp-provision-will-be-in-farm-bill/

Illegal marijuana growers poison forests — these people fight back

https://www.nationalgeographic.com/environment/2019/04/illegal-marijuana-growing-threatens-california-national-forests/

#### For more information

Dan Flynn jdflynn@ucdavis.edu