

Today is \_\_\_\_\_, \_\_\_\_\_ the \_\_\_\_\_. This is Ken Morgan's Northcoast Ag Report, our lead story is about \_\_\_\_\_ when we return

Longtime Ag Senator Chuck Grassley expects a farm bill to make it out of committee this year. However, he's pessimistic about a farm bill actually getting done this year. Grassley sees the Senate Ag Committee starting to write a bill in another month or so...tape

Cut 1 \_\_\_\_\_ :23 \_\_\_\_\_ OC..."put together"

But Grassley says floor action will depend, as it always does, on the Majority Leader making time, including possibly delaying or canceling a week-long October recess...tape

Cut 2 \_\_\_\_\_ :26 \_\_\_\_\_ OC..."this years"

Grassley does not expect many changes to the bill from current law, though ag lawmakers will have to deal with the usual budget pressures and threats to crop insurance and food stamps, while fixes will be needed to the dairy and cotton programs.

## **Disease Resistant Strawberry Research Gets Funding Boost**

DAN AUGUST 25, 2017 [INDUSTRY NEWS RELEASE](#), [RESEARCH](#)

**The Public Strawberry Breeding Program at the University of California, Davis, and colleagues in California and Florida have received a \$4.5 million grant from the [National Institute of Food and Agriculture](#) of the U.S. Department of Agriculture to improve the disease resistance and sustainable production of strawberries throughout the nation.**

**The collaborative grant is good news for strawberry farmers and consumers everywhere, according to Rick Tomlinson, president of the [California Strawberry Commission](#). To signal its own support, the strawberry commission pledged an additional \$1.8 million to the UC Davis program.**

"An investment in the UC Davis strawberry breeding program is an investment in the future of strawberries," Tomlinson said. "Thanks to their groundbreaking research and strong partnerships, Director Steve Knapp, and his colleagues are developing improved strawberry varieties publicly available to farmers."

## Improving genetic resistance to disease

Strawberries constitute a \$4.4 billion-dollar industry in the United States, and 94 percent of the nation's strawberry fruit and nursery plants are grown in California and Florida.

Strawberries are especially vulnerable to soil-borne pathogens, which destroy plants and greatly reduce yield. Since the 1960s, strawberry growers have depended on fumigants like methyl bromide to treat soils before planting berries in an effort to control the disease. But methyl bromide has been phased out by the Environmental Protection Agency and will no longer be available after 2017.

“Following the elimination of methyl bromide fumigation, strawberry growers are under greater economic pressures, and there is an urgent need for improved, disease-resistant strawberry varieties that will thrive without fumigation,” Knapp said.

Knapp will head a team of scientists from UC Davis, UC Santa Cruz, UC Riverside, the UC Division of Agriculture and Natural Resources, Cal Poly San Luis Obispo, and the University of Florida.

Together, researchers will identify and manage pathogen threats, mine elite and wild genetic resources to find natural sources of resistance to pathogens, and accelerate the development of public varieties resistant to a broad spectrum of disease and other pests.

“Strawberry growers are faced with the need to deliver high-quality fruit to consumers year-round, while protecting the environment, fostering economic growth in their communities and coping with profound changes in production practices,” Knapp said. “We look forward to collaborating with our industry partners through research, agricultural extension, and education to help them reach those goals.”

## UC Davis Public Strawberry Breeding Program

During six decades, the UC Davis Public Strawberry Breeding Program has developed more than 30 patented varieties, made strawberries a year-round crop in California and boosted strawberry yield from just 6 tons per acre in the 1950s to 30 tons per acre today.

Knapp took over directorship of the program in 2015. He and his team are working to develop short-day and day-neutral strawberry varieties; studying the genetics of disease-resistance, fruit quality and photoperiod response; and applying genomic techniques to make traditional strawberry breeding more efficient. They have 10 public varieties in the pipeline and plan to release one or two new strawberry varieties later this year.

## Initiative collaborators

The grant is funded by USDA's Specialty Crop Research Initiative. Collaborators from UC Davis include agricultural economist Rachael Goodhue, plant pathologist Thomas Gordon, and plant scientists Julia Harshman and Thomas Poorten.

Other key collaborators are Oleg Daugovish with UC Agricultural and Natural Resources; Alexander Putman at UC Riverside; Julie Guthman at UC Santa Cruz; Gerald Holmes and Kelly Ivors, both at Cal Poly; and Seonghee Lee, Natália Peres and Vance Whitaker, all of the University of Florida.

by [Diane Nelson](#), UC Davis College of Agricultural and Environmental Sciences

# Knowing the Rules for Drones in Agriculture

BRIAN GERMAN AUGUST 24, 2017 [REGULATION](#), [TECHNOLOGY](#)

Using drones in agriculture has become more prevalent in recent years as larger commercial models become available. As they become more popular it's important to remember that using an Unmanned Aircraft System (UAS), or drone, comes with a strict set of regulations from the Federal Aviation Administration (FAA).

This spring, the FAA discovered 21% of all commercial drones were being used in agriculture. "Whether you're using drones for fun or business, you really have to pay attention to the requirements," said Tulare County Agricultural Commissioner, Marilyn Kinoshita.

A drone cannot be used in the application of any fungicides, seeds, or fertilizers without a FAA Part 137 certification. Kinoshita explained that "doing anything to mitigate a pest, you fall under the FAA rules about being certified as a pilot." Using a drone to simply spray water also requires certification.

There are a few exceptions that do not require compliance with Part 137. A UAS may be used for the dispensing of live insects, "or surveying or taking photographs, then you don't fall under that Part 137 rule which is on the certification process for ag aircraft operation," Kinoshita said.

Along with FAA requirements, operators must also adhere to the California Food and Agriculture Code requirements dictating drone operation for pest control. Operators will also need a Pest Control Aircraft Pilot's certificate from the California Department of Pesticide Regulation and will need to register with the appropriate County Ag Commissioner.

The FAA will enforce the restrictions on drone operation and will investigate cases when needed. Those looking for more information on the requirements for drones in agriculture are encouraged to visit the [FAA website](#) or contact their local FAA district office.