

May
2016

Kearney Research News

University of California
Agriculture and Natural Resources



Research and Extension Center System

May 2016 [UC Kearney Agricultural Research and Extension Center website](#)



Message from the director: Jeff Dahlberg

Though there have been good rains and adequate snowpack this past year, we are still concerned about the drought and its effect on farmers in the area. We continue get questions about more efficient water use on all of the crops we do research on here at the Center. The drought remains a constant thought on everyone's mind; however, we still need to realize that there are other issues as well, like pathogens, insects, nematodes, post-harvest issues, agronomic issues, labor, etc.

The Center is busy with fieldwork and gearing up for field days and tours. People have been busy planting new field trials or getting ready to add new research to the Center. Our raisin grapes and table grape vineyards are coming along very nicely. We've had advisory groups out to assist us in how to best manage these new vineyards and lots of interest in using them for new research activities from our Cooperative Extension folks. I have received several grants to work on drought tolerance and its impact on sorghum. One project is looking at how sorghum interacts with soil microbial populations to enhance its ability to tolerate drought, while the other project employs drone technology to collect rapid phenotypic data under various drought conditions and how we use that to correlate what we are seeing in the field with what genes are involved with those responses. California is a perfect place to study drought tolerance for field crops, since we don't get any real rainfall during the summer months and this allows us to "control" in the field when and how we apply drought stress to plants. This makes us somewhat unique in the world and those of us in the sorghum community are working to take advantage of this unique opportunity.

We continue to work on getting new equipment and update and upgrade our facilities. If you stop by, you'll notice an improvement in our internet access and speeds, some new equipment around the fields, and some upgrades to buildings. As part of this upgrading, we have initiated a Strategic Planning process and are working to develop a long-term plan for the future of the Center. We hope to have that completed by the fall of this year, so look for this on our website in the near future.

Spring is always a time of renewal and if you are so inspired, you can help us financially and allow us to expand our research efforts so that we can continue to find sustainable solutions to the variety of problems that face our farmers and our food systems by donating to KARE using our [on-line donation button](#)

As always, feel free to contact me at jadahlberg@ucanr.edu, through our Facebook page, [blog](#), or at our [website](#).

A handwritten signature in black ink that reads "Jeff Dahlberg". The signature is written in a cursive, flowing style.



Kearney research participates in STEM high school conference at Reedley College.

Long-time Kearney Agricultural Research and Extension Center researcher and budding motivational speaker, [Jeff Mitchell](#), participated in the STEM Conference organized for local San Joaquin Valley high school students on Saturday, April 23, and thoroughly enjoyed the interactive, high-energy experience.

STEM refers to science, technology, engineering, and math programs and the day-long conference was an effort by the College to stimulate interest and preparedness in interested high school students to pursue educational programs and careers related to these disciplines. Mitchell was invited to share with students his work in agricultural systems research and soil health. [Read more.](#)



Kearney held the 62nd annual conference on soilborne plant pathogens and the 48th California nematology workshop March 22-26, 2016.

[Andreas Westphal](#) helped provide back to back meetings that concentrated on sharing research, discoveries, and disease problems, as well as developing and new pest management technologies for soilborne diseases. These diseases include fungus, nematode, bacteria, and virus populations found in the soil. Information was shared in meeting rooms and field sites. Soilborne pests of food crops, ornamental plants and native plants were discussed. [Read more.](#)



Lettuce planting workshops provided by Kearney, volunteers, and donors helped about 2300 Kings County and 3500 Fresno County third graders learn more about healthy lifestyles and agriculture.

In March, Kearney participated in the Kings County Farm Day and the Fresno County Farm and Nutrition Day. These events are collaborative events between the Fairgrounds, Department of Education, the Farm Bureau and many volunteers from each county to help third graders better understand and appreciate how much we rely upon agriculture.

For more information on the Fresno County workshop, please [click here](#).

For more information on the Kings County workshop, please [click here](#).



Invasive superweed Johnsongrass is the target of a new nationwide research effort.

A team of researchers has received a \$5 million grant from the U.S. Department of Agriculture to find new ways to combat Johnsongrass, one of the most widespread and troublesome agricultural weeds in the world.

"Johnsongrass is a huge problem," said [Jeff Dahlberg](#), UC Cooperative Extension sorghum specialist and director of the [UC Kearney Agricultural Research and Extension Center](#) in Parlier, Calif. "It impacts many different crops and is very hard to control."

Dahlberg is part of the team that includes scientists from Virginia, Kansas, North Carolina, Texas and Georgia. Andrew Paterson, director of the Plant Genome Mapping Laboratory at the University of Georgia, Athens, is the lead investigator. [Read more.](#)



Experts converge in March to discuss human-wildlife conflict resolution.

Wildlife and people have been in the news lately. Perhaps you've heard of [coyotes wandering in your neighborhood](#). You might have also read about how [you shouldn't feed wildlife](#). Did you know they are connected? It's a problem when people feed coyotes either intentionally or unintentionally through uncovered garbage and outdoor pet food. Available food may encourage coyotes to associate closely with humans and to lose their natural fear of us. These interactions will be discussed during a special symposium on urban coyotes at the [27th Vertebrate Pest Conference](#). [Read more](#).



Organic agriculture research symposium was webcast January 20, 2016.

The UC Kearney Agricultural Research and Extension Center hosted a free public webcast on January 20, 2016. This included key presentations at the Organic Agriculture Research Symposium. Among the speakers are André Leu, president of Organic International/IFOAM, and Mathieu Ngouajio, USDA/NIFA national program leader in cropping systems.

The livestream included workshops on soil health, long-term and strategic research and innovative educational systems. [Read more](#). Watch the [recorded webinar](#) on YouTube.