



COLLEGE OF AGRICULTURE AND LIFE SCIENCES

Yuma Center of Excellence for Desert Agriculture

SPRING 2016 UPDATE

YUMA CENTER OF EXCELLENCE FOR DESERT AGRICULTURE
"SOLUTIONS TO DESERT AGRICULTURE'S PRESSING PROBLEMS"

The Yuma Center of Excellence for Desert Agriculture (YCEDA), a public-private partnership, addresses high-priority issues identified by industry stakeholders to improve all aspects of desert crop production systems and economics. The Center of Excellence will not duplicate the work of other entities but will flexibly complement them, bringing new resources and a rapid response to desert agriculture's pressing problems including but not limited to water, crop production, labor, food safety, homeland security, desert agriculture stresses, and economic and environmental challenges.

YCEDA in the field at
UA's Yuma Ag Center

(L-R: John Palumbo, Paul Brierley, Kurt Nolte)

Photo credit: Annie Deckey

Yuma Center of Excellence for Desert Agriculture
DesertAgSolutions.org

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Moving Forward to Bring New Tools for Fighting Fusarium Wilt of Lettuce

Work is ongoing with Dr. Barry Pryor to implement significant research projects as a result of November's successful International Symposium on Fusarium Wilt (FW) of Lettuce. These include currently-used variety and product trials as well as development of early detection tools. The YCEDA website is currently

being revamped to act as a central hub for international efforts on fighting FW. Visit

DesertAgSolutions.org to learn more.

Conference presentations are available on the website in video and slide format.



Bringing Big Data Decision Tools to Fresh Produce Production

YCEDA has partnered with USDA's Agriculture Research Service (ARS) and Earth Knowledge, Inc., (EK) to apply Big Data decision tools to enhance the productivity of fresh produce growers. EK and USDA-ARS have formed a Cooperative Research and Development Agreement that gives them access to years of research data and models that can be applied to our cropping systems. YCEDA is funding development of a roadmap that will define opportunities for applying these powerful tools and data to soil-borne diseases of leafy greens, allowing us to identify triggers and mitigation procedures to avoid disease pressures. Over time, these decision tools can be greatly expanded to help with many production decisions – leading to maximal productivity.

Bringing Big Data to the Date Industry

No, we aren't talking about Match.com! YCEDA is working with producers and UA's Dr. Glenn Wright to bring Big Data decision tools to the rapidly-growing desert date industry. Phase 1 will include the collection of data that impacts production decisions. Data collected using UA's Dr. Kurt Nolte's drone expertise and other technologies will be fed into a Big Data platform provided by Earth Knowledge, Inc. Future phases will overlay and correlate production data with other datasets to assist with maximizing production efficiencies and aligning production to market demands.

Bringing Advanced Technology to Agriculture

YCEDA has partnered with nMode Solutions, Inc. to create roadmaps for developing and applying advanced technology to agriculture's urgent needs. The roadmaps will identify and attempt to fill technology gaps in areas such as real-time pathogen detection, Ag mechanization and underground imaging.

Mitigation Strategies for Cadmium

YCEDA and the Center for Produce Safety are funding a rapid response research project by UA's Dr. Charles Sanchez in commercial produce fields. This will include high-resolution soil and product sampling to analyze in-field variability, and evaluation of mitigation strategies to assure compliance.

Protecting Crops from Bird Damage and Contamination

YCEDA funded UA's Dr. Paula Rivadeneira to convene a task force including researchers, wildlife experts and technology companies on bird deterrent methodologies, to find ways to keep birds and other animal intrusions from occurring. This included a design challenge to incentivize the development and implementation of effective deterrent systems.





YCEDA is Growing

Our professional staff recently doubled to two which means that we can now double our efforts. Welcome to Sonnet Nelson, our new program coordinator! You can contact her at sonnetnelson@email.arizona.edu or 928-782-5873.



YCEDA is excited to team up with Limelight Creative Group to showcase our efforts, results and partnerships through media releases, social media, and a newly designed website. Our thanks to JV Farms for sponsoring their efforts.



Yuma AgTech Startup Weekend

What is Startup Weekend? It is a fifty-four-hour event to promote grassroots entrepreneurship. These events have been held in many cities and are very community focused. The goal is to educate, support, and empower people to create viable products. Attendees pitch ideas, form teams and develop projects. YCEDA was proud to play a key role in focusing the event on Ag Tech and to be a part of the organizing committee to stimulate this type of innovative collaboration. To learn more, visit <http://yuma.up.co/events/8897> or contact Sonnet Nelson.

Where We've Been

SWAG Breakout session/AZ Town Hall on Water

We were happy to be part of the Southwest Ag Summit and share information on crucial topics. YCEDA led a breakout session bringing staff and participants from the AZ Town Hall on water to share highlights of their "Keeping Arizona's Water Glass Full" consensus, and allowing input from Yuma on statewide water issues.

Governor's Roundtable Discussion

YCEDA participated in an Agriculture Roundtable with Arizona Governor Doug Ducey and industry leaders sharing how innovative public-private partnerships help facilitate adequate funding to the University of Arizona for priority projects while emphasizing the crucial role a strong Cooperative Extension program plays in solving problems.

YCEDA Presentations Given:

- Yuma Ag 100
- AZ Crop Improvement Association
- Graham County Farm and Ranch Day
- Yuma Fresh Vegetable Association Annual Meeting

Grand Opening of Western Growers' Center for Innovation and Technology

WGA Food Safety Science & Technology Committee Meeting

SWAG Highlights: Fun at the YCEDA booth / YCEDA Executive Director Paul Brierley leading a breakout session on water





Yuma Center of Excellence Founding Members

Amigo Farms
**Barkley Ag Enterprises*
C&E Cattle Co.
Church Brothers Farms
**D'Arrigo Brothers Co. of California*
Doug Mellon Farms
Duda Farm Fresh Foods
Farm Credit Services Southwest –
Yuma/Imperial Valley
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