



2019 Spanish Smartscape Class



THE UNIVERSITY OF ARIZONA
Cooperative Extension
Maricopa County

Maricopa County Cooperative Extension

July/August 2019

IMPROVING THE LIVES, COMMUNITIES, AND ECONOMY IN MARICOPA COUNTY

IN THIS ISSUE

Spanish Smartscape

By Kirti Mathura

In May 2018 we ran our first Spanish Smartscape course in Maricopa County. The previous year, Kaitlin Poe-Orsburn organized a one-day Irrigation class, to test the waters and gauge whether there would be sufficient interest to warrant a full course. As a huge portion of the landscape industry involves members of the Spanish-speaking community, we decided it was time that we reach out to them and offer the same quality, research-based training program that is available to English speakers.

What a great idea! But all of our materials are in English...oh dear. We were very fortunate that Pima County Smartscape had developed several Spanish-language programs, paired with each of the courses they offer in English. They were tremendously generous in sharing materials to get us started. We were able to put together a fantastic team of instructors, each with an impressive background of knowledge and experience, and eager to share with the students.

As the Program Coordinator of Maricopa County Smartscape is not by any means fluent in Spanish, we are so grateful that a sharp, dependable team of bilingual (as well as a brave

non-Spanish-speaking individual!) Master Gardeners stepped forward and helped things run as smoothly as any of our other courses. They assisted with translation of materials, helped with announcements, and interpreted as needed to keep communications smooth.

Our Spanish program started out small, but we're sure it will continue to grow over the years. It's new and we need to get the word out that this opportunity is available. We have gradually made connections with members of the Hispanic community, and they are enthusiastically helping spread awareness.

As with all of our Smartscape programs, our goal is to provide knowledge regarding the design, installation, irrigation, and maintenance of water-efficient landscapes that offer beauty and comfort, enriching our communities. Information is drawn from plant, soil, and pest research conducted through the U of A, and other institutions. Instructors encourage the use of improved techniques and materials to maximize water savings in residential, commercial, and municipal landscapes.



Field Crops



Wanda Casady



2019 SAI



THE UNIVERSITY OF ARIZONA
Cooperative Extension
Maricopa County



2019 Summer Ag Institute (SAI)

By Brandon Moak

It's summertime! While most are seeking shade, 30 Arizona educators faced the heat while participating in The Summer Agricultural Institute (SAI), a jam-packed, five-day tour of Arizona agriculture industries. SAI is designed to teach K-12 teachers about food and fiber production through hands-on experience and help them incorporate that knowledge in the classroom through practical curriculum development.

Most people in the US are food privileged, meaning that they don't have to think about what it takes to grow their food safely and for it to be readily available; they only need to think as far as their closest grocery store. At the same time, our world is quickly growing to an expected population of 9.8 billion in 2050 while dealing with a decrease in available land, an increase in cumbersome regulation, and the average age of US growers being less than 10 years from retirement - combined with low influx of youth taking up careers in agriculture - resulting in a dire prediction that there won't be enough farmers to feed the world by a single generation.

Over 65 educators applied for SAI, and the top 30 were selected to meet up in Phoenix to start the traveling workshop, visiting 20 sites (such as a vineyard, a cattle feedlot, an apple orchard, a progressive dairy, Nature Sweet's nearly 1400 acre of tomato greenhouses, a cattle auction, and a number of research facilities operated by The University of Arizona, including the



Dr. Pedro Andrade, Associate Specialist, Agricultural-Biosystems Engineering, talks to the teachers about his Precision Agriculture research.

2100-acre Maricopa Agriculture Center) by the end of Thursday. On Friday, teachers were trained in lesson materials that allow them to teach their requirements while also connecting students to agriculture.

Applications for 2020 SAI (30th year) will be accepted beginning this fall.

WEBSITE INFO: <https://cals.arizona.edu/agliteracy/SAI> (video, places toured, & detailed schedules)



MCCE Welcome's Gigette Webb

By Ed Martin

We want to welcome Gigette Webb to the Maricopa County Cooperative Extension team. Gigette joined MCCE on June 3 and went to work right away. On June 10, just a week later, she was off on tour with our Summer Ag. Institute. The Institute hosts a week-long educational experience for teachers from across the state. Luckily, Gigette was able to attend, and next year; she be leading the program. Gigette comes to us with 22 years of experience as teacher in Arizona. In 2017 she was awarded Teacher of the Year at St. Thomas Aquinas grade school. She grew up in an agriculture family, was the 2013 Outstanding Volunteer at Millennium FFA, and has experience in fund raising and advertising. We are all excited to get her on board. Her primary programming will be to work with teachers across the state to incorporate agriculture into their STEM programs and lessons. Welcome Gigette!



Program Spotlight: Field Crops

By Dr. Ayman Mostafa

The Field Crops and Integrated Pest Management (IPM) Program

Forage crops are the largest in terms of acreage planted in Arizona. The University of Arizona Field Crops and Integrated Pest Management (IPM) Program is conducting applied research and education efforts to establish IPM approaches based on the establishment of economic thresholds, investigate control methods, and create a sustainable approach for management of significant alfalfa, sorghum, and corn pests in the region. Another significant effort of the Program is to investigate the recommendations for phosphorus and potassium application in alfalfa.

The main objectives of the Program:

- Improve the decision-making process of forage pests and nutrient management practices in Arizona and southwestern US for alfalfa and forage production.
- Develop and disseminate IPM strategies and agronomic practices through Extension Programs based on research findings.

Various Program's achievements and efforts during recent years:

- Established an economic threshold for alfalfa weevil and aphids—the two major insect pest groups in alfalfa—for the first time in the southwest desert.
- React to the emergence of sugarcane aphid (SCA) in sorghum by providing scientific information on the efficacy of insecticides and helped provide selective insecticide option.
- The Program is conducting a multi-year investigation of root rot management in alfalfa to aid in the registration of an effective fungicide to control the disease for the first time in alfalfa in Arizona.
- Multi-year experiments studying the applications of phosphorus and potassium in alfalfa. The results suggest changes in the University of Arizona recommendations for alfalfa nutrient management.

- We investigate the implementation of biological control agents, like entomopathogenic fungi, predators, parasitic wasps, and cultural control practices in the management approaches of forage pests.
- We are carrying out outreach and education efforts to promote results of the research outcomes, including two workshops for forage and alfalfa and new technologies for field crops, two field days to showcase the trials we conduct, and two tent talks.
- We produce weekly Program newsletter, peer-reviewed extension and periodical publications with the outcomes of our research.
- The Program is involved in over \$2.8 million of grant funds over the last five years to address the issues of field crops that generate over \$1.5 billion for the Arizona economy.

Reduction in broad-spectrum pesticide usage in forage crops will allow for sustainable natural controls and provide sustainable area-wide pest reduction across the region, resulting in fewer pest outbreaks and pest resurgences. Our collaboration with growers and ag professionals across Arizona is serving as a vehicle for knowledge transfer, potentially impacting IPM and agronomic practices on large acreages in the southwestern region. These collaborations are expected to result in a significant, measurable reduction in the amount of pesticide residues in the environment, balances nutrient management, and **reduce risks to health**.



Treating alfalfa in root rot trial



Program Event



Phosphorus and potassium fertilizer tube trials at MCCE

Volunteer Spotlight: Wanda Casady

By Marc Allen Fleischer

Meet Wanda Casady, who besides being a top volunteer and nearing 1,300 hours in the Master Gardener program, is a former medical imaging expert. Which begs the question, “Is there a doctor in the house?” Wanda became a Master Gardener in the fall of 2014 and to this day she still uses her health care skills. “I see many similarities and parallels working the MG Help Desk and the time I spent working at the Vanderbilt University Medical Center in Tennessee before I retired. I began as a Help Desk intern back when we still used paper tickets. As I got more involved, I could see just how passionate many people were about their plants. At the Help Desk we try to make a diagnosis about what may be the root problem and I wanted to help them save their ‘pet’ plants. You need to be compassionate and understanding as well as respectful and supportive,” Wanda said.

As a Help Desk veteran, she also facilitates the forum of all Help Desk personnel that meet at the Extension Office. Wanda wears many volunteer hats. She is a garden teacher at Broadmor Elementary School in the Tempe Elementary School District along with two mothers who are Master Gardeners. The school has 600 kids and its own garden on campus. “The students meet outside once a month and they are really fascinated about growing plants and the environment, so I’m sure some future Master Gardeners will emerge,” she said.

Wanda enjoys writing and, together with Don Sutton, writes plant diagnostic articles for Roots and Shoots. Even before becoming a Master Gardener, she remembers how someone reached out to her for gardening advice. “There was this one neighbor who had the largest tree in the neighborhood. It was a monster eucalyptus that she wanted to remove,” she said. Sometimes she finds surprises in her own garden that require making a diagnosis. “You can be reluctant in your mind, but not in your garden,” she said. Recently, Wanda further expanded her love of container gardening while testing her growing skills with raised beds. “We have a small yard with two Dahlbergia Sissoo and an African



Sumac and space is limited, so now I have begun using larger containers with multiple plants in the same pot. Blending plants together makes them more manageable as well as artistic,” she said.

Most days you can find this dedicated professional at the Help Desk, giving advice and calming people’s nerves. With all the volunteering she does during the week, you would expect Wanda to be too busy for anything but helping others. Just not on Fridays though... That’s reserved for golf!



THE UNIVERSITY OF ARIZONA
Cooperative Extension
Maricopa County

The Director's Cut By Ed Martin



Well, temperatures are toppling over 110°, cars are patrolling the parking lots looking for shade, and the commute to work has gotten a little easier – must be summer. The summer months for our office bring some welcomed and anticipated programs and changes. Our Field Crop/IPM program is deep into the growing season, making early morning field visits to avoid the heat and then spending afternoons analyzing the data collected. Our 4-H program has also kicked it up a gear with the onset of summer. First, there was the [4-H STEM](#)

camp at the University of Arizona in Tucson. Sixty-five youth learned about robotics, biofuels, and food safety. Then, just as the STEM camp ended, our traditional 4-H Camp GRIT (Growing, Reaching, Impacting, Tomorrow) took place at the James 4-H Camp and Learning Center. The nutrition and physical activity team in SNAP-Ed and EFNEP are taking advantage of the opportunity to engage with schools that have summer school activities and continue their education at community centers across the county. Our turf science program continues their work on improving grass quality, reducing irrigation water applications, and finding alternative ground cover for our schools, parks, and sports facilities. Master Gardeners just completed one class, and now, they're gearing up for another starting in July. The Family Resource Center has been having children safety workshops, distributing car seats and pack-n-plays for parents who attend the instructional workshops. We are also excited to have two new faculty joining us. Gigette Webb joins us as our new Agricultural STEM agent, and Jennifer Weber started July 1 as an Assistant in Extension, Pesticide Safety Education. Finally, as one fiscal year ends and another begins, I wanted to thank the Extension state office and the Maricopa County Board of Supervisors for their continued support of our office and programs.

CONTACT INFORMATION

- Traci Armstrong Florian Nutrition/SNAP-Ed/EFNEP
(602) 827-8237 tarmstro@cals.arizona.edu
- Kim Christman..... 4-H Youth Development
(602) 827-8291 kchristman@email.arizona.edu
- Scott Koenig..... Project CENTRL
(602) 827-8227 skoenig@email.arizona.edu
- Ed Martin County Director/ANR/Water Resources
(602) 827-8200 ecmartin@email.arizona.edu
- Patty Merk Family and Youth
(602) 827-8257 pmerk@cals.arizona.edu
- Ayman Mostafa Agriculture
(602) 827-8213 ayman@cals.arizona.edu
- Rebecca Senior Horticulture
(602) 827-8276 rsenior@cals.arizona.edu
- Kai Umeda Turfgrass Science
(602) 827-8214 kumeda@cals.arizona.edu
- Michael Chamberland.....Horticulture
(602) 827-8219 mchamb@email.arizona.edu
- Gigette Webb.....Agricultural STEM
(602-827)-8253 gigettewebb@email.arizona.edu
- Jennifer WeberPesticide Safety Education
(602) 827-8222 jennyweber@email.arizona.edu

ABOUT TOWN

Master Gardener Plant Clinic
(3rd Wednesday of Every Month)
Where: Maricopa County Cooperative Extension
More Information:
<https://extension.arizona.edu/events/2019-03-20/maricopa-county-plant-clinic>

Spanish Smartscape
When: July 9 - August 8 3:00pm - 6:00pm
(Tuesdays & Thursdays)
Where: Maricopa County Cooperative Extension
More Information:
<https://extension.arizona.edu/events/2019-07-09/maricopa-county-smartscape>

Cotton Tent Talks
When: July 10 7:00am - 9:00am
Where: A Tumbling T Ranches
More Information:
<https://extension.arizona.edu/events/2019-07-10/cotton-tent-talks>


Alfalfa & Forage Tent Talks
When: July 17 7:00am - 9:00am
Where: Jason Rovey's Farm
More Information:
<https://extension.arizona.edu/events/2019-07-17/alfalfa-forage-tent-talks>

Inaugural 4-H Clover Ball
When: July 25 5:30pm
Where: Park Avenue Weddings
242 S. Park Avenue, Tucson
More Information:
<https://extension.arizona.edu/4hfoundation/sites/extension.arizona.edu/4hfoundation/files/data/2019clover-ball.pdf>

Sports Field Turf Management Field Day & EXPO
When: Aug 1 7:30am - 12:00pm
Where: Peoria Sports Complex
More Information:
<https://extension.arizona.edu/events/2019-08-01/sports-field-turf-management-field-day-expo>

DIG - Cacti & Succulents
When: Aug 22 6:00pm - 8:00pm
Where: Maricopa County Cooperative Extension
More Information:
<https://extension.arizona.edu/events/2019-08-22/dig-cacti-succulents>

Maricopa County Cooperative Extension Monthly Event Calendar
<http://extension.arizona.edu/maricopa>

 **Check us out at:**
<https://www.facebook.com/MaricopaCountyCooperativeExtension>

Edited By:
Edward Martin
Sheri Semones
Amber Jones
Mary Conner