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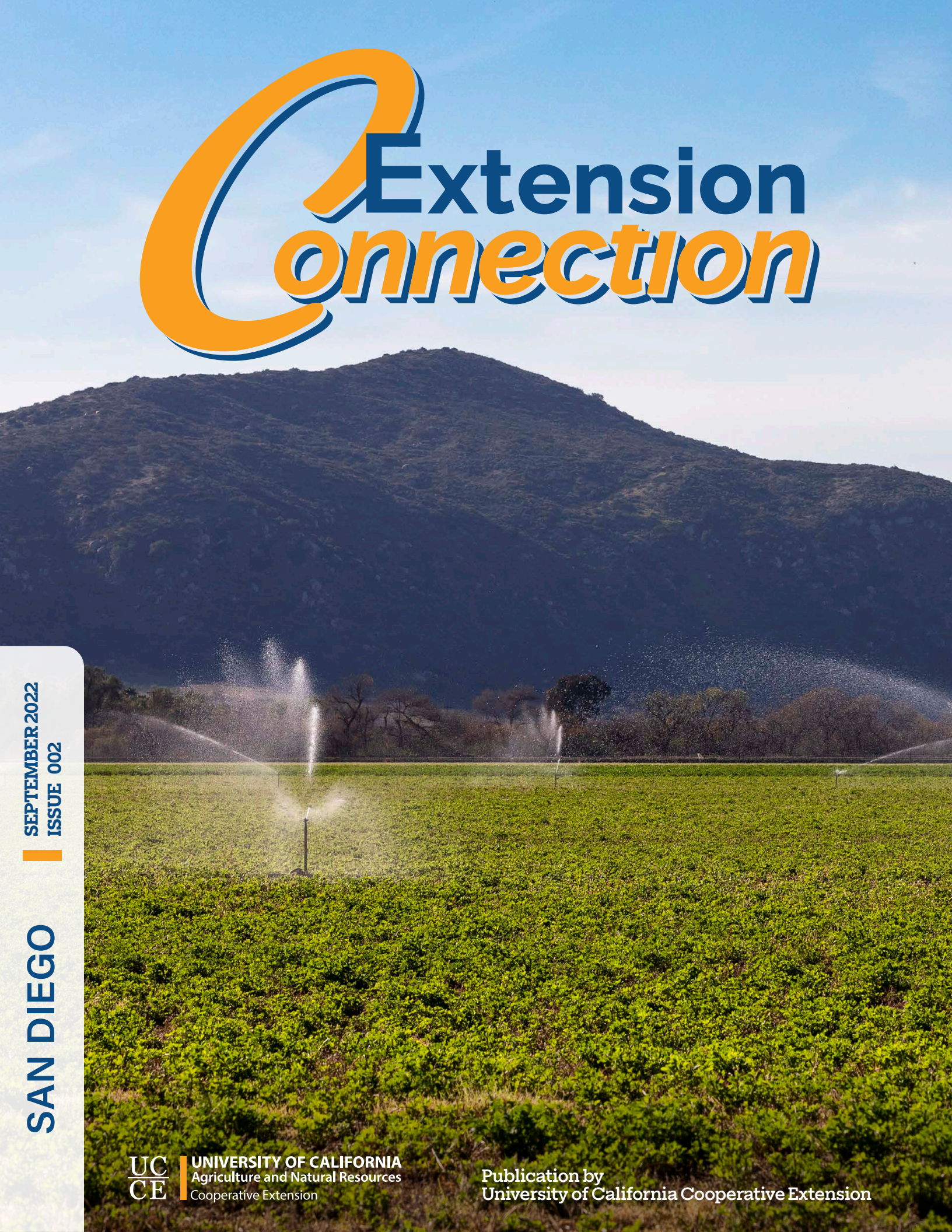

SAN DIEGO

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Agriculture and Natural Resources
Cooperative Extension

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SEPTEMBER 2022

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INTRODUCTION FROM OUR

County Director

Dear Readers,

There are some remarkable happenings with the UCCE San Diego County since we launched the first newsletter 3 months ago. During this quarter the UCANR Vice President (VP), Dr. Glenda Humiston visited UCCE San Diego office, research projects, the Farm Bureau, and Center for Horticulture & Agricultural Research (CfHAR), and the City of Escondido. On another issue, the UCCE San Diego involved on a recruitment of the new Organic Materials Management Area Advisor. The position will be located at the South Coast Research and Extension Center and will serve Orange, Los Angeles, and San Diego counties with focus on organic waste from landfills into alternative end markets. The selection process is complete, and the advisor is expected to come onboard sometime soon.

Another significant happening is the approval of an "Agricultural Pass program" by the County Board of Supervisors. This program is designed to help ranchers in the event of wildfire or other disaster and allow commercial livestock or agricultural operators access to evacuated areas to care for their animals and crops.

San Diego County and most regions in CA have been experiencing wave of extended heat, high temperatures, and draught since the onset of summer. It was forecasted that we may have heavy wind and excessive rainfall from the 9th through the 11th of September 2022 with potential excessive runoff / flooding for San Diego County Deserts, Mountains, rivers, creeks, streams, and other low-lying and flood-prone locations. The wind and rain culminated with no adverse effect on county crops, farms, and the ecosystem.

During this quarter San Diego is also battling to manage a new pest, the "Mexican fruit fly", a concern, particularly for Agricultural Operators and Home Gardeners. As a result of the detection of this pest near Valley Center, in Escondido, CA., the California Department of Food and Agriculture (CDFA) placed a portion of San Diego County under quarantine. We are informed that two citrus groves where detections occurred were treated with an organic formulation of Spinosad (extract from naturally occurring bacteria). There may also be a release of large population of sterile male flies (mate with fertile wild female flies but produce no offspring) around the infestation areas to reduce population of the fly and eventually eradicate it. Our IPM advisor is working collaboratively with the CDFA, AMW, and the USDA in informing growers, providing education, and supporting growers with necessary quarantine-related information, compliance agreements, and towards the protection of the food supply and the environment.

Enjoy reading!

Oli Bachie, PhD
UC Cooperative Extension San Diego County Director

Green Fruit Beetles: A Sign of Summer in San Diego

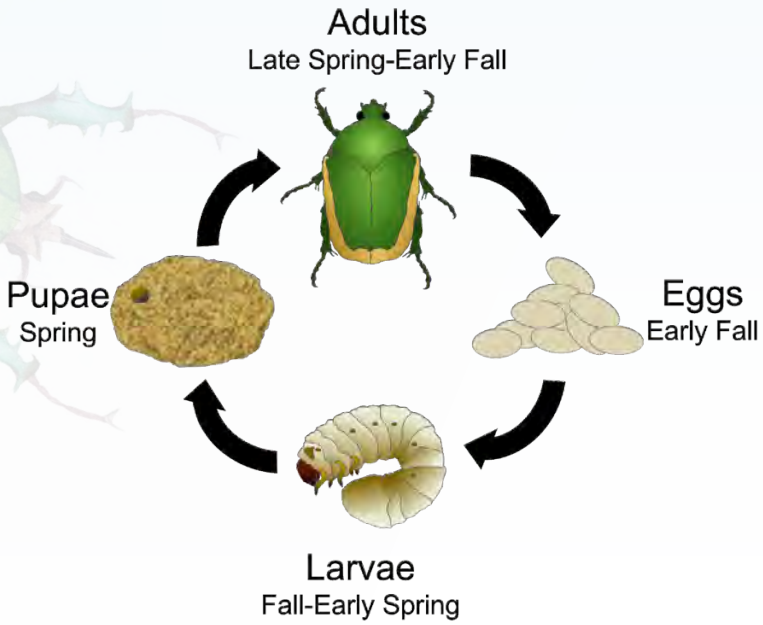
A loud buzzing… A flash of metallic green… What was that?

A common sight during summers and early fall in San Diego, you've probably observed green fruit beetles in your neighborhood. Green fruit beetles (GFB) have many common names: figeater beetles, green fig beetle, western green June beetle, and are known by the scientific name *Cotinis mutabilis*. Like other June beetles, GFB is a species of scarab in the family Scarabaeidae.

ADULT IDENTIFICATION

Adult beetles are large, often over an inch long, and are easily recognizable by their distinctive coloration. Seen from above, GFB is a matte metallic green with tan coloration on the outside edge of their wing covers. On the underside, GFB is a bright, shining metallic green. They have short, horn-like projections on the front of their heads, and short clubbed antennae. While flying, adults make a distinctive loud buzzing sound. Although they are noisy and can be startling, GFB do not bite and pose no direct threat to people. GFB are striking insects and are beautiful if you get to see them up close.

LIFECYCLE



While you are most likely to see adult beetles, GFB actually spends most of its life living in the soil as larvae. In the late summer and fall, mated female beetles lay their eggs just below the surface of organic matter (frequently compost, mulch, or manure). These eggs soon hatch into larvae. Larvae are small off-white grubs, usually found slightly curled in a c-shaped position. You may encounter larvae if digging through the soil or turning over a compost pile. While the adults die off in the fall, the larvae survive over the winter feeding on decaying matter in the soil around them. Larvae grow in size and develop through 3 instars before forming

pupae in the spring. Pupae develop inside of hollow cells made of the surrounding soil that resemble small dirt balls. Adults emerge from the soil beginning in late spring or early summer. GFB adults are strong flyers and can travel relatively long distances in search of food or a place to lay eggs.

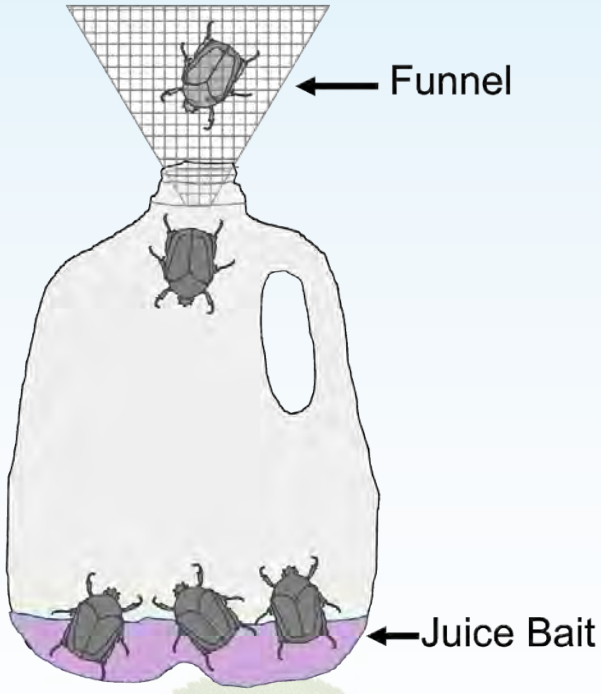
Green fruit beetle in an African Tulip Tree, feeding on the flowers and nectar.

PEST STATUS AND DAMAGE

Unfortunately, as their name implies, GFB are strongly attracted to the scent of ripe fruit and adults are an occasional pest of various soft-skinned fruit. Adults can chew into the flesh of figs, apricots, cherries, peaches, plums, grapes, and caneberries. While mating, adults will aggregate together, sometimes resulting in large numbers present in fruit trees. GFB larvae are not pests and unlike some other June beetles, do not harm the roots of plants while in the soil. While they infrequently cause serious damage, GFB adults can be an annoyance for home gardeners hoping to enjoy a harvest of fruit in the late summer.

MANAGEMENT

Managing GFB is mostly a matter of prevention, and the most effective way to reduce the impact of adult beetles is to focus your efforts on the eggs and larvae. Remove or cover sources of decaying



organic matter like compost piles or leftover yard debris and lawn clippings. If removal or covering is not an option, spreading the organic matter thinly or removing it from directly around fruit trees will make it less attractive to female beetles. If you do suspect GFB larvae are present in your compost, frequently turning the compost will bring larvae to the surface and expose them to predation or make them easier to remove by hand.

Adult beetles are most common in late summer and early fall, so choosing fruit tree varieties that are ready to harvest earlier in the season can help prevent feeding damage. Cleaning up fallen and decaying fruit will reduce the smell that adults are attracted to and will also help prevent other pests like ants. Finally, if you have large numbers of adults present on your fruit and need to control them immediately, some adults can be captured using homemade traps. Fill the bottom of a container with a few inches of a 1:1 mixture of water and grape or peach juice. Used 1-gallon milk jugs work well for

constructing traps. Next, create a funnel using mesh or another material, and place the narrowest end into the mouth of your container. GFB adults are attracted to the fruit juice, will enter through the funnel, and then be unable to exit. If these methods fail, it is not recommended that you resort to insecticides. It is unlikely to be effective, and you risk harming other beneficial insects.

CLOSING THOUGHTS

As summer draws to a close and fall begins, enjoy your last few chances to see GFB this year! If you find yourself having trouble appreciating these beautiful beetles, try thinking of them like hummingbirds, only clumsier. And if you do find them unacceptably damaging your fruit, make sure to manage any nearby organic material to reduce the number of larvae, and try homemade traps for the adults instead of turning to insecticides. Better to practice good prevention strategies for next year and learn to live with these charismatic beetles in the meantime.

For more information on Green Fruit Beetle, visit the UC IPM website at http://ipm.ucanr.edu/PMG/GARDEN/FRUIT/PESTS/grfruitbeetle.html

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Bug Boxes and Beyond

Girls in STEM Entomology Outreach at Cabrillo National Monument.

Once the field season is over, outreach season is in full swing. Annika Nabors, our community education specialist for the invasive tree pests program, recently attended an outreach event focused on encouraging girls in STEM. EcoLogik, hosted five years running at Cabrillo National Monument, is a free two-week STEM summer day camp for underrepresented female and female-identifying youth ages 9 to 16. The unique program fuses ecology and technology to connect youth to the natural resources and science of America's National Parks.

The culminating event of camp is the Women in STEM Fair, when campers get to meet professional women working in STEM and discuss different career opportunities, from climate science to neurology.

The following day, campers present their own scientific and engineering projects using tools they've learned throughout camp. At the UCCE booth, campers saw real scientific specimens of diverse pollinators native to San Diego County, received handout materials on the importance of buying firewood where you burn it to reduce the spread of invasive pests, played a "Spot the Bumble Bee" quiz game to identify insects, learned about the wasp with the most painful sting in North America, and much more!

To learn more about the EcoLogik program and register your camper for 2023, visit here: https://www.nps.gov/cabr/learn/kidsyouth/ecologik.htm

To learn more about the Protecting Pollinators program, visit here: https://ucanr.edu/sites/PollinatorAttractiveness/

To learn more about goldspotted oak borer and other invasive tree pests, visit here: https://cesandiego.ucanr.edu/Natural_Resources/

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Measuring Irrigation System Distribution Uniformity

How to improve your irrigation system performance.

Distribution uniformity (DU) is an indicator of the performance of an irrigation system. It captures how uniformly the irrigation system distributes water in a value ranging from 0 to 1. Values equal to or less than 0.5 are typical for a very bad sprinkler system and values ranging from 0.75-0.8 are suitable for a well-designed and maintained sprinkler system and 0.9-0.95 for a good drip system.

Distribution uniformity strongly affects irrigation efficiency and can help identify areas that need improvement. Optimizing DU is helpful for improving water- and fertilizer-use efficiency because when the uniformity is low, one needs to irrigate longer to provide water for dry plants in areas where insufficient water is applied. This means that plants receiving more water results in excessive leaching and runoff loss of fertilizers and pesticides, subsequently affecting plant uniformity.

Distribution uniformity is strongly affected by pressure uniformity in the area that is irrigated at the same time, i.e. irrigation block. As water travels in a pipe moving from the water source to the sprinkler head or drip emitter, it loses pressure due to friction on the wall of the pipe. As a result, the sprinkler or emitter closer to the water source is exposed to a higher pressure and discharges more water than

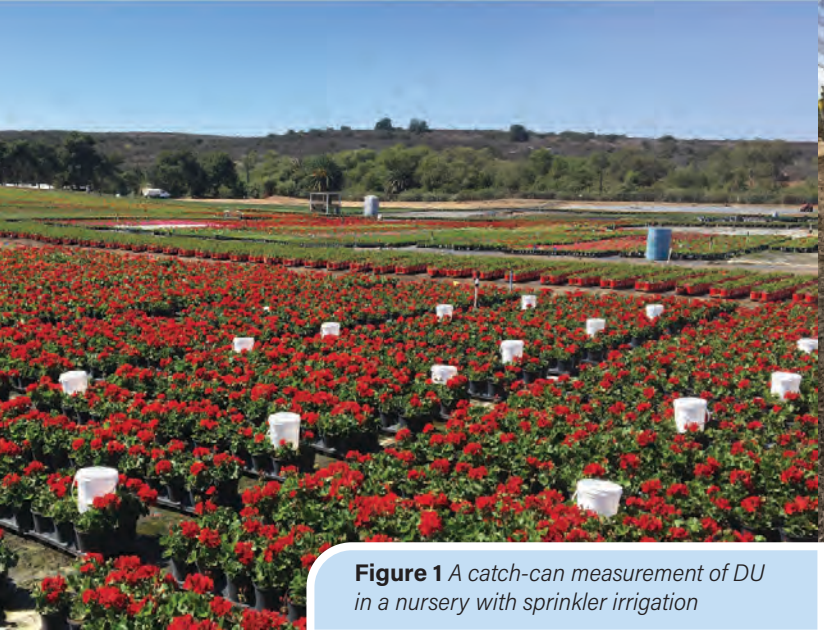

Figure 1 *A catch-can measurement of DU in a nursery with sprinkler irrigation*

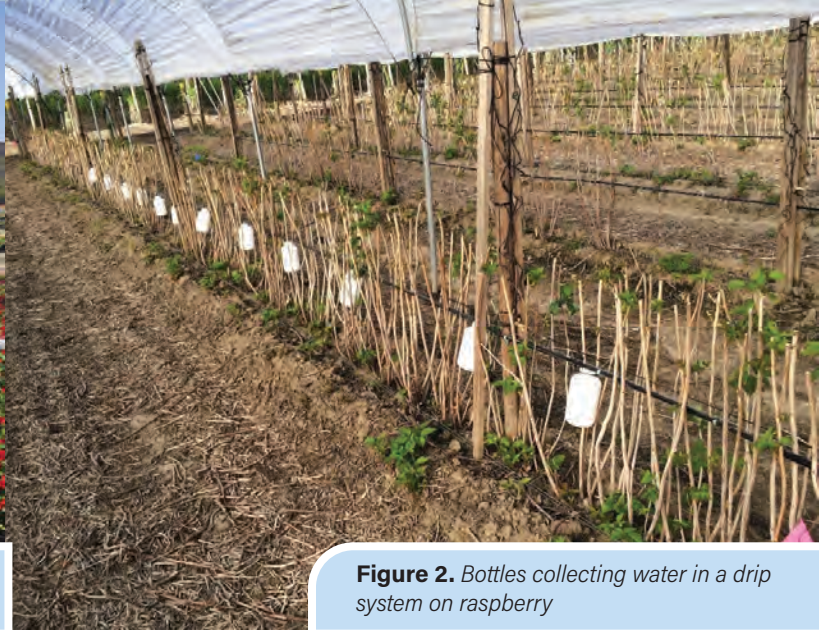

Figure 2. *Bottles collecting water in a drip system on raspberry*

the sprinkler furthest from the water source, negatively affecting distribution uniformity.

To minimize pressure loss within an irrigation block and between irrigation blocks, careful system design, including pipe sizing and block sizing is important. Less pressure loss occurs in a larger diameter pipe and with a lower flowrate; so generally larger pipes are better, although they are more expensive to purchase and install. Similarly, lower flowrate emitters or nozzles result in a lower flowrate in the pipes and hence in a lower pressure loss through them. However, with low-flowrate nozzles, one need to irrigate longer to apply the same depth of water and it's not always possible to fit all irrigation blocks in the daily schedule.

Elevation also plays a role in pressure uniformity in the irrigation system, since a difference in elevation of 2.3 feet corresponds to a difference in pressure of 1 psi. In other words, an area of the field 23 feet higher than another, will have 10 psi less of pressure. Finally, to equalize pressure between different irrigation blocks, pressure regulators can be installed at each block valve. A pressure regulator is a device that reduces pressure to a preset value but cannot increase the pressure. Thus, it's important to design the mainline so that the furthest block from the water source receives enough pressure for the sprinklers or emitters to work properly. Pressure regulators can be utilized to reduce pressure for the blocks closer to the pump.

Distribution Uniformity is easy to measure in the field. Typically, this is done by setting a grid of buckets in between sprinklers for sprinkler systems or a row of containers or bottles under each emitter for drip systems (Figure 1 and 2). In the US we use the "low quarter" DU, meaning that we compare the average water received by the lowest quarter of the samples to the average of all samples. For example, if we set up a grid of 6 by 6 buckets between four sprinkler heads, to calculate DU we divide the average water received by 9 buckets (i.e. a quarter of 36) by the average of water in all buckets (Table 1).

A handy online tool has been produced to help you calculate DU in your irrigation block. Access the tool at: occviz.com/CW3/CU/CU.html or via www.clean water3.org/growertools.asp.

Collected Values

	Position Col	Position Row	Sample mL
obs 1	A	1	95
obs 2	A	2	122
obs 3	A	3	136
obs 4	A	4	113
obs 5	A	5	92
obs 6	A	6	97
obs 7	B	1	73
obs 8	B	2	111
obs 9	B	3	128
obs 10	B	4	106
obs 11	B	5	84
obs 12	B	6	84
obs 13	C	1	87
obs 14	C	2	103
obs 15	C	3	120
obs 16	C	4	101
obs 17	C	5	85
obs 18	C	6	80
obs 19	D	1	114
obs 20	D	2	119
obs 21	D	3	121
obs 22	D	4	103
obs 23	D	5	96
obs 24	D	6	106
obs 25	E	1	144
obs 26	E	2	144
obs 27	E	3	124
obs 28	E	4	114
obs 29	E	5	125
obs 30	E	6	133
obs 31	F	1	153
obs 32	F	2	147
obs 33	F	3	130
obs 34	F	4	110
obs 35	F	5	111
obs 36	F	6	134

Values ordered Low to High

	Position Col	Position Row	Sample mL
obs 7	B	1	73
obs 18	C	6	80
obs 11	B	5	84
obs 12	B	6	84
obs 17	C	5	85
obs 13	C	1	87
obs 5	A	5	92
obs 1	A	1	95
obs 23	D	5	96
obs 6	A	6	97
obs 16	C	4	101
obs 14	C	2	103
obs 22	D	4	103
obs 10	B	4	106
obs 24	D	6	106
obs 34	F	4	110
obs 35	F	5	111
obs 8	B	2	111
obs 4	A	4	113
obs 19	D	1	114
obs 28	E	4	114
obs 20	D	2	119
obs 15	C	3	120
obs 21	D	3	121
obs 2	A	2	122
obs 27	E	3	124
obs 29	E	5	125
obs 9	B	3	128
obs 33	F	3	130
obs 30	E	6	133
obs 36	F	6	134
obs 3	A	3	136
obs 25	E	1	144
obs 26	E	2	144
obs 32	F	2	147
obs 31	F	1	153

Lowest Quarter

Low Quarter Average: **86**

All Values Average: **112**

Table 1: *The lowest quarter of the observations (the 9 lowest values) were averaged to obtain the low quarter average.*

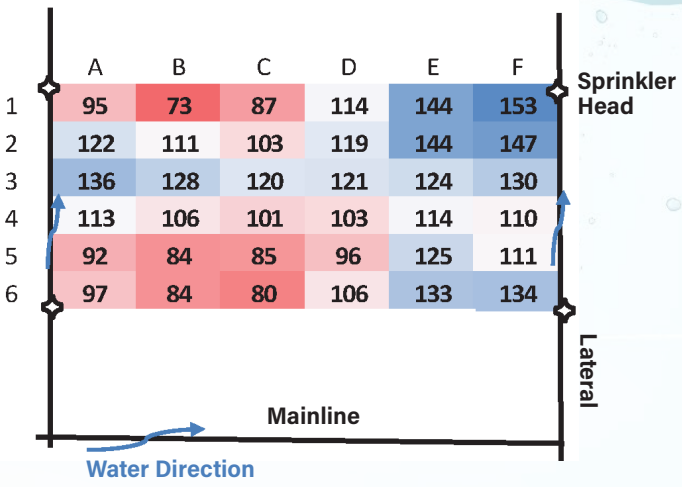

Table 2: *Spatial distribution of the volumes of water collected. Each number represents the volume in mL collected by each bucket (Figure 1).*

Table 3

	PROBLEM	SOLUTION
1	Different models of sprinklers or sizes of nozzles within same irrigation block.	Always use the same brand/model of sprinkler and with the same nozzle! Inspect nozzles yearly for wear.
2	Poor pressure distribution within an irrigation block or between different blocks.	Measure pressure in irrigation block, larger pipes cause less pressure loss; smaller flowrate causes less pressure loss. Install pressure regulators at each block valve.
3	Plugging of drip emitters or spray stakes.	Filter water at water source, flush irrigation system by-weekly.
4	System is run at pressure too high or too low.	Sprinklers generally require around 50 psi, drip around 10. Be familiar with specs! Differences in elevation also affect pressure, 2.3 feet higher is 1 psi less.
5	Leaks.	Fix the leaks.
6	Wind drift.	Generally, wind drift occurs most when sprinklers produce mist, and this is often due to too high pressure.

In the example to the left, DU is 86/112= 0.76. This is a good DU for a sprinkler system but a poor DU for a drip system.

Other reasons for a bad DU are related to poor operation or maintenance of the irrigation system (Table 3). For example, mixing different brands or models of sprinkler heads is a common reason for a bad DU. In drip systems, leaks will cause pressure to drop locally and cause differences in pressure distribution. Proper maintenance of filters and regular flushing of mainlines and laterals is a good practice that minimizes emitter plugging. Finally, operating the irrigation system at a pressure higher or lower than the emitters or sprinklers design pressure will result in poor irrigation system performance and often poor DU.

Distribution uniformity is one of the main factors that determine the efficiency of an irrigation system. Measuring DU in the field is easy and can be done with simple tools and easy calculations. A few practices were discussed in the article, including measuring pressure and installing pressure regulators, maintaining filters, flushing lines and fixing leaks, that can improve DU substantially.

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Glenda Humiston Visits UCCE San Diego

Vice President for UCANR, Glenda Humiston visited UCCE San Diego, local research project, and nearby nurseries facilities and institutions.

Glenda Hemiston (Photos: Robert Padilla)

On August 03, 2022, Glenda Humiston, Vice President of the University of California, Division of Agriculture and Natural Resources (UCANR) paid a visit to San Diego County.

The day started with introductions by the University of California Cooperative Extension (UCCE San Diego) advisors and staff, and a briefing from County Director (CD) Oli Bachie on San Diego county agriculture, current programs, and new UCCE positions to be filled soon. Bachie's briefing also highlighted some of the constraints UCCE San Diego faces implementing research and extension programs, and brought the need for expanded facilities to the attention of the VP.

Following Bachie's briefing, Glenda spent time interacting with the advisors and staff of UCCE. San Diego. She spoke about current funding opportunities for UCANR, employee salary equities, and the need to communicate with local elected officials and stakeholders the role of UCCE

and the value it provides to the community. Over a light lunch, Glenda entertained question raised from advisors and staff, ranging from her vision for the future of UCANR to explaining the path she took to become VP. At the conclusion of lunch, CD Bachie and other UCCE advisors and staff took Glenda on a field tour so she could meet collaborators of UCCE and see first-hand some of the agricultural production in San Diego County.

The tour started with a visit to an avocado grove in Escondido where Ali Montazar, a cross-county advisor for irrigation and water management, has an active research project. Dr. Montazar's project addresses water use and efficiency in avocado, one of the primary crops grown in San Diego County and much of Southern California. Although the steep and hilly terrain made accessing the site difficult, this stop provided an excellent opportunity to showcase the research and extension activities of the county and cross county advisors.

Glenda then had the chance to visit Ken Altman, the largest horticultural producer in the country, at the Center for Applied Horticultural Research (CfAHR) in Vista. During the visit, Altman briefed Glenda about his nursery and the extent of his business. Altman grows a large variety of nursery crops for indoor and landscape purposes, and employs over 6,000 people all over the country. Altman also spoke about the facilities at CfAHR and his willingness to offer research and laboratory space for use by UCCE San Diego. A long-time collaborator with UCCE, Altman expressed his commitment to support UCANR in its research needs and of the benefits he sees from UCCE partnering with local producers. While the laboratory at CfAHR is currently unused, Altman reiterated his desire to share the space with any interested UCCE San Diego advisors. Glenda and Bachie thanked Mr. Altman for his generous offer of support and facilities.

Next, Glenda met with Mary Matava, president of the San Diego County Farm Bureau (FB) at the Farm Bureau headquarters in Escondido. Glenda and Mary discussed the importance of FB as both collaborator and clientele, and the importance of keeping good relationships with the local UCCE office. Both reiterated the mutual benefits that come from a strong working relationship between UCCE and FB. Also discussed was UCCE San Diego's office lease, and the need for facilities that satisfy the requirements of the UCCE office, such as storage, laboratory, greenhouse, and commercial standard kitchen space. "Regardless of whether UCCE San Diego continues to lease the FB offices, UCCE San Diego will show its presence and visibility at the FB building at least on a rotational basis and will continue to collaborate with the important partner that is FB," Bachie said.

The final stop on Glenda's visit was with the Escondido City Hall and a brief tour guided by Jennifer Schoeneck – Deputy Director of Economic Development of the city of Escondido. Also in attendance were leaders from nearby community colleges. Jennifer provided detailed information on a currently unused warehouse facility that the city intends to remodel and retrofit so it can be used as an agricultural hub. Various ag technology companies, universities, and colleges would utilize the space together to conduct research, teach, and support agriculture within San Diego County. Glenda expressed the potential of the center and that UCANR will look at opportunities on how to collaborate and interact to develop the facility into a broad-spectrum agricultural hub.

Advisors and staff who accompanied Glenda throughout the field tour were Eric Middleton, Chandra Richards, Robert Padilla, Janis (Jan) Gonzales, Shirley Salado, Lea Corkidi, and Sue Lake. Glenda and the group wrapped up their visit and tour with a sense of accomplished mission.

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UCCE's Program on Climate-Resilient Agriculture

One of the newer programs at UCCE San Diego is the Climate-Resilient Agriculture education and outreach program.

One of the newer programs at UCCE San Diego is the Climate-Resilient Agriculture education and outreach program. While weather and seasonal changes have always been a primary consideration for farm and ranch operations, climate change has heightened the need to address intensifying impacts to agriculture. Although the San Diego county region enjoys a relatively mild Mediterranean climate year-round, climate change is projected to impact agriculture through rising input costs, complying with regulations, and mitigating climate-associated damage such as invasive insect pests, wildfire, heatwaves and freezes, and floods. UCCE San Diego has developed a foundational program over the last four years that curates and delivers current research, information, and resources to support climate resiliency relevant to this region's unique agricultural industry.

The program began in 2018 with funding support from the County of San Diego Land Use and Environment Group as part of the County's Climate Action Plan (CAP) to reduce greenhouse gas emissions and increasing carbon sequestration. Our program goals include understanding the impacts of climate trends on agricultural production and farm enterprises in San Diego County;

providing solutions and assistance for local agricultural operations; developing information resources about the policies, research, programs, and strategies available in the region; and raising awareness of how agriculture is part of the solution to climate change. In an effort to provide robust and multidisciplinary programming, we work in collaboration and consultation with local growers and ranchers; UC research departments, statewide programs, Specialists and Advisors; local Resource Conservation Districts; County of San Diego partners; and many more. Our clientele include agricultural producers, policy makers, government agencies, researchers, educators, consultants, and other public and private stakeholders.

Our website ucanr.edu/sites/Climate_Resilient_Agriculture/ provides a hub for all program information, including links to past training events, resource databases, research information and publications, and information from our annual Climate Action and Agriculture Symposium (CASS) ucanr.edu/sites/Climate_Resilient_Agriculture/Symposium. Held in May for the last four years, the CAAS brings a broad range of stakeholders together to share current information with growers and policymakers to gain a better understanding of climate change's impact on the unique agricultural environment and economy of the region. Current policies, programs, challenges, strategies, and resources are discussed. Topics addressed at the 2022 event focused on agricultural energy management, accessing carbon markets, and updates on local programs and grants supporting energy conservation in agriculture.

A newly announced publication from the program is titled State of the Science: Climate-Resilient Agriculture In San Diego County, a literature and policy review. https://ucanr.edu/sites/Climate_Resilient_Agriculture/Education/Lit_Policy_Review_2022 This report examines in depth, San Diego County's farming environment, climate change projections, climate-resilient farming practices, regulations and policies, and the economics of climate-resilient agriculture. One key finding was that although 70% of San Diego County's total agricultural production value is from nursery crops, there is very little research related to climate resiliency in this sector of the industry, and even less based on the Southern California production environment. The analysis also discusses the diverse and unique production agriculture environment in San Diego County and the work being conducted in multiple arenas to support sustainable agriculture and local agricultural producers.

Dr. Heiner Leith, UC Davis presenting at the 4th Annual Climate Action and Agriculture Symposium about Energy Management in Controlled Environment Agriculture.

Vital to program success is collaborative partnerships in all aspects of resource development and extension. Climate-resilient agriculture is a multidisciplinary subject, so our local program draws from the expertise across the UC Agricultural and Natural Resources Division (UC ANR), including statewide Specialists for climate-smart agriculture, organic agriculture and researchers on soil health, organic waste, water quality, and a variety of specialty crops. Local UCCE Advisors add their knowledge of small farms, agricultural economics, weed management, integrated pest management, and irrigation management to this program, too. Additionally, program staff are always open to collaboration and partnership opportunities for outreach and extension.

In 2021, UCCE partnered with the Resource Conservation District of Greater San Diego County on a series of webinars ucanr.edu/sites/Climate_Resilient_Agriculture/Education/2021_Discussion_Series and workshops about sustainable agricultural practices and funding resource opportunities. Representatives from regional and County programs explain relevant policies and ordinances at workshops and the annual Symposium. Agricultural producers, themselves, are key partners for program development and extension. They provide a critical perspective on program-related topics, advise program staff on current climate-related challenges and information needs, and are partners on research projects and field training events.

Other programs at UCCE San Diego focused directly on sustainable agriculture include the UC ANR Statewide Climate Smart Agriculture program, which provides technical assistance to growers applying to climate-resilient grant opportunities; and the regional Sustainable Agricultural Lands Conservation program, which provides financial support in the interest of preserving agricultural land.

There are several projects planned over this program year, including a cost-benefit research analysis of climate-smart agricultural practices in San Diego County. To learn more about the Climate-Resilient Agriculture education and outreach program, we invite you to check out the website, subscribe to the program email list for program announcements, or contact program staff directly.

CLICK TO SUBSCRIBE TO EMAIL LIST

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Meet the Team

Get to know the people behind Cooperative Extension San Diego!
Each issue we like to highlight some members of our amazing team.

Meet our Advisors

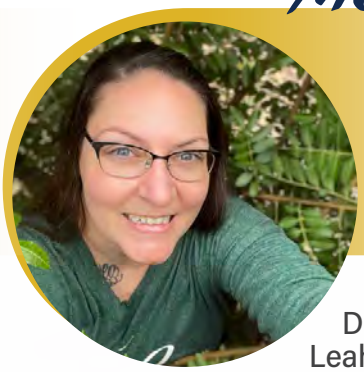
Ali Montazar, PhD
Irrigation & Water Management Advisor

Ali Montazar has a PhD in Irrigation and Drainage, and currently serves as Irrigation and Water Management Advisor for San Diego, Imperial, and Riverside Counties. He has more than 20 years of research, extension, teaching, and technical consulting experience and has served in several leadership positions in agricultural water management and irrigation engineering in California and abroad.

He has a well-developed applied research and training program in southern California, and currently has several ongoing irrigation and water conservation studies in avocados, wine grapes, carrots, lettuce, sweet corn, onions, date palms, and alfalfa. His focus is sensor-based irrigation management, water conservation, drainage and salinity management, and best irrigation and nutrient management practices.

He enjoys working with growers and ranchers in southern California and providing them useful information and irrigation tools to enhance the efficiency of practices and the benefits of their agricultural operations.

Meet our Staff



Leah Taylor
Master Gardener Coordinator

During her college years, Leah Talyor worked at the County Department of Agriculture, Weights, and Measures in the Entomology lab identifying invasive insect species and participated in the creation of new San Diego beekeeping ordinances. After graduating college with a degree in Horticultural Science, she conducted research on pollinators and honey bees for UCCE and UC Davis, as well as taught community education courses on gardening for health and wellness. In 2018, she added Master Beekeeper to her resume and continues to be very active within the UC California Master Beekeeper Program.

Throughout her career at UCCE San Diego and UC Davis, Leah collaborated with UC Master Gardener Program personnel and volunteers on several grant-funded projects. One such project is UCCE San Diego's award-winning garden education work (in partnership with Alzheimer's San Diego) with county memory care facilities.

Leah is a passionate gardener, mother of two, and enjoys spending as much time talking about insects as possible.

NEED TO GET IN TOUCH?
Visit our office directory and find all of our office advisors and staff.

Calendar

Stay up-to-date with seminars, webinars, trainings, events, and more!

SEPTEMBER

OAK WOODLAND RECOVERY & GSOB MANAGEMENT WORKSHOP

- September 20th & 27th
- 20th Oak Canyon Nature Preserve
  27th Online Webinar
- ucanr.edu/sites/gsobinfo/

MASTER GARDENER FALL PLANT SALE

- September 24th
- Casa Del Prado at Balboa Park
- mastergardenersd.org/

AVOCADO IRRIGATION WORKSHOP

- September 28th
- SD Farm Bureau 420 S. Broadway, Escondido
- ucanr.edu/sites/Climate_Resilient_Agriculture

NOVEMBER

WEST COAST RODENT ACADEMY

- November 2nd to 4th
- Location TBD
- ucanr.edu/sites/WCRA/

Extension Connection

We hope you have enjoyed this issue of the Extension Connection!

We will continue bringing you the latest news from UC Cooperative Extension San Diego, and we would also like to hear from you.

What Do You Think?

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