



Features from your Advisors

January 2020 (Volume 23 Issue 1)

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UCCE-IMPERIAL COUNTY WELCOMES NEW 4-H REPRESENTATIVE



The University of California Cooperative Extension has hired a new 4-H Program Representative to oversee the 4-H Youth Development Program for Imperial County.

Anita Martinez started her role on Jan 2, 2020. Her responsibilities will include oversight, compliance, marketing and growth of the current program. She will also focus on major outreach to underserved populations in Imperial County and on working with the business community for partnership opportunities.

Anita is a life-long Imperial Valley Resident with roots in Heber, where she attended grade school before graduating from Southwest High School in El Centro. Anita graduated with a Bachelor of Science in Business Management with an emphasis in Marketing. She has served in various roles, such as Marketing Supervisor for a casino, Marketing Director for an agriculture company and off-road race team, and Marketing Director for two major credit unions.

Before taking on this role, she was employed as the Chief Executive Officer at the Holtville Chamber of Commerce, where she successfully redesigned and organized the 2018 and 2019 Carrot Festival.

As a former 4-H member, she remained a strong advocate of the 4-H Program and was a project volunteer until she decided to start a new club in her home town of Heber, CA. Dogwood 4-H Club, named after the road that links most major Imperial Valley Cities, was proudly founded in 2013 with only 12 members. Since then, it has grown to just over 18 families, serving as many as 34 members.

As the new 4-H Representative, Anita is excited to share her knowledge and help expand the program to new families and members who can enjoy the benefits of the program. She is looking forward to helping leaders expand on youth/adult partnerships and opportunities and to attract new adult leadership to the program.

Anita can be reached at (442) 265-7711.

30TH ANNUAL FALL DESERT CROPS WORKSHOP

Ali Montazar, Irrigation & Water Mgmt Advisor, UCCE Imperial & Riverside County

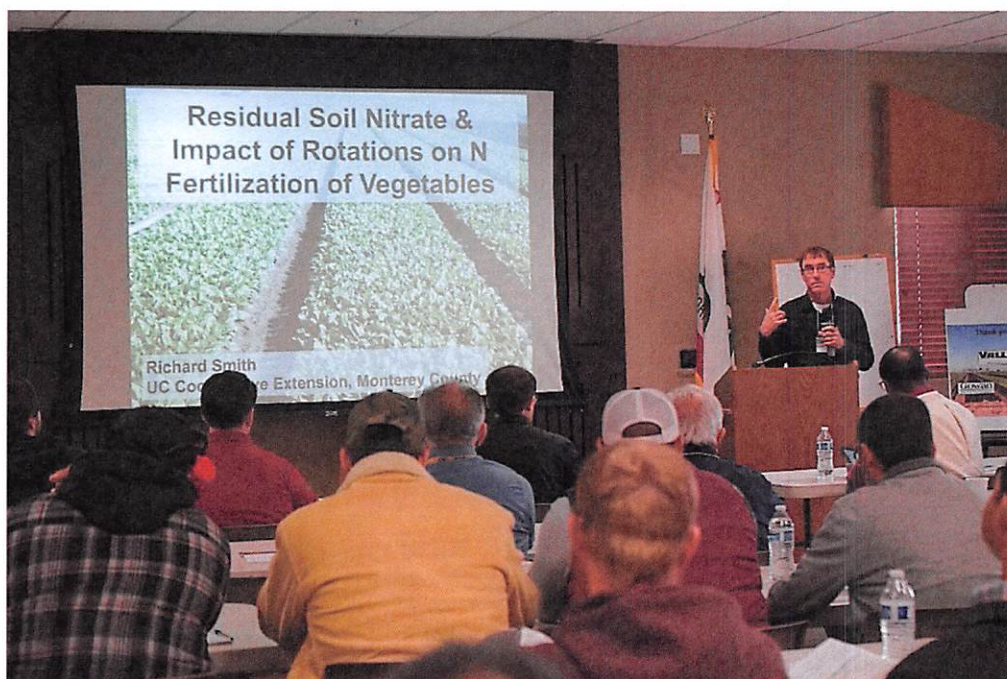
University of California Cooperative Extension - Imperial County held its 30th “Fall Desert Crops Workshop” at Farm Credit West in Imperial. At this event, 18 speakers from UC Riverside, UCCE Imperial and Riverside Counties, UCCE Monterey County, University of Arizona, Imperial County Agricultural Commissioner, Imperial County progressive growers, and water industry and private sectors came together to bring innovative ideas and solutions; and disseminate the outcomes of their recent studies and experiences in the desert region. Ryan Kelley, Chair of Imperial County Board of Supervisors delivered the opening remark. The event was co-organized by UCCE Imperial county advisors; Ali Montazar and Oli Bachie. We thank all presenters, growers, and other participants for making this event successful.



Ryan Kelley, Chair of Imperial County Board of Supervisors, gave the opening remarks.



Ali Montazar, UCCE Imperial Irrigation and Water Management Advisor, delivered a talk on Drip Irrigation for Organic Spinach Production and Downy Mildew Management.



Richard Smith, UCCE Monterey County Vegetable Crop Production Advisor, spoke on Residual Soil Nitrates and the Impact of Rotations on N Fertilizer Rates for Healthy Vegetable Production.



Channah Rock, Professor & Water Quality Specialist at the University of Arizona, talked about Water Treatment Implementation for Growers.



Brooke Latack, UCCE Imperial Livestock Advisor, talked about the Benefits of Grazing Sheep on Productivity and Soil Health of Alfalfa.



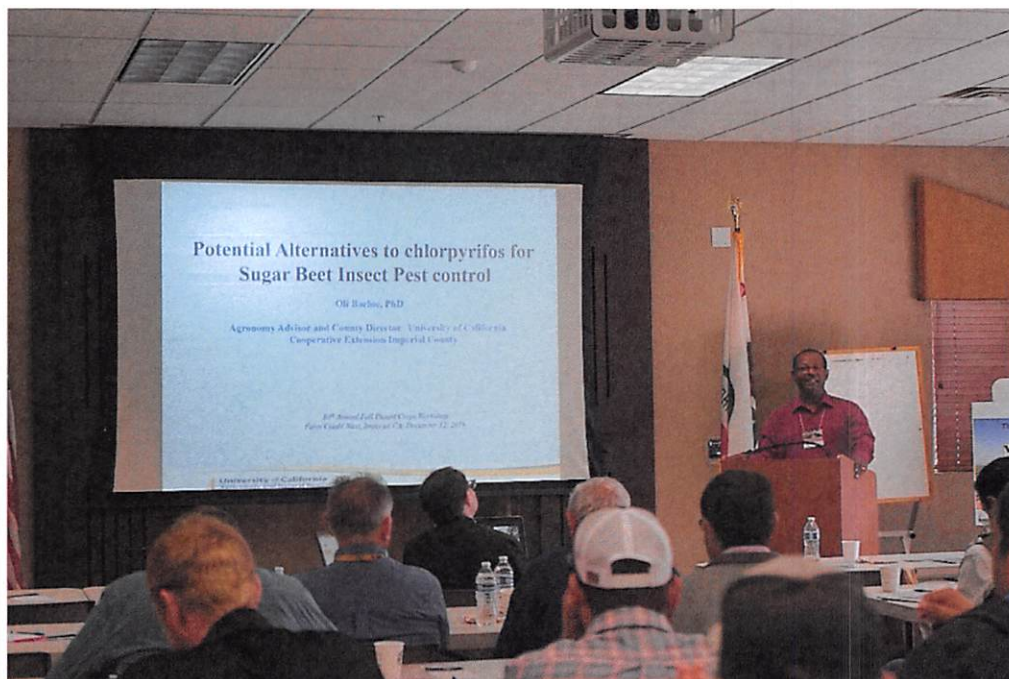
Alex Putman, Assistant Specialist in Cooperative Extension and Assistant Plant Pathologist at UC Riverside, gave a talk on Management of Soilborne Diseases and Downy Mildews of Vegetables in Winter Crops.



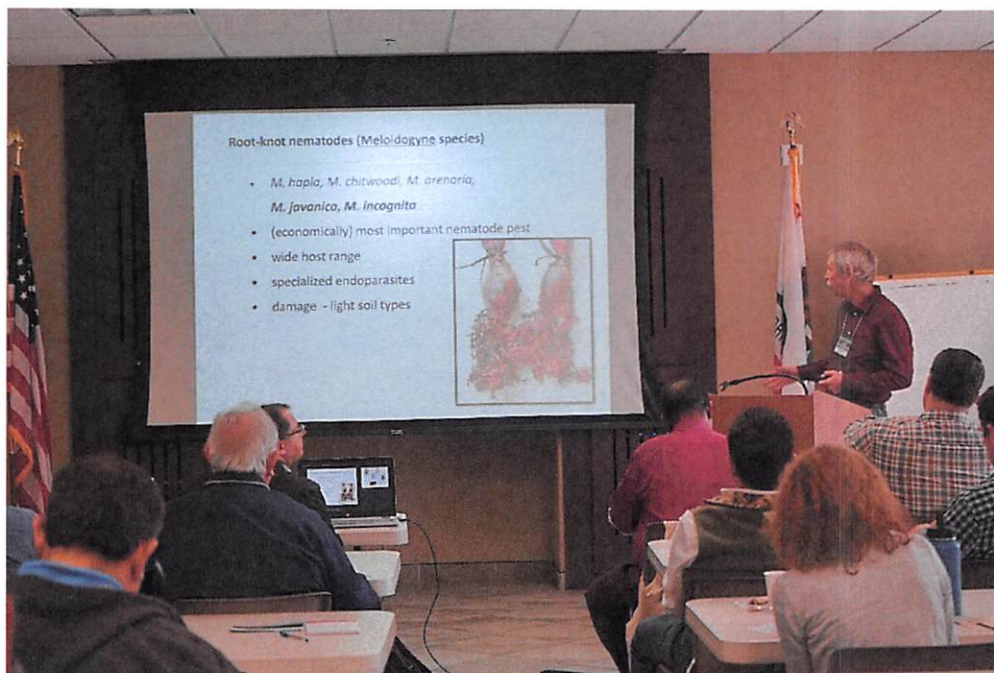
Ronald Leimgruber, Leimgruber Farms; and Kevin Johnson, Southwest Territory Manager with Valley Irrigation, gave a joint talk on Irrigation Advanced Technology and Water Conservation Experience in the Imperial Valley.



Carlos Ortiz, Imperial County Agricultural Commissioner, let those in attendance know about the Laws and Regulations with regards to Industrial Hemp.



Oli Bachie, UCCE Imperial Agronomy Advisor and County Director, talked about potential Alternatives to Chlorpyrifos Pest Management Options for Low Desert Sugar beet.



Antoon Ploeg, Cooperative Extension Specialist & Nematologist at UC Riverside, gave a talk on Root-knot nematode management: what's current and what's coming.



Ayman Mostafa, Area Programmatic Agent and Regional Specialist with the University of Arizona Cooperative Extension, spoke about Alfalfa Winter Pest Management and Root Rot Management in Alfalfa.



Michael Rethwisch, UCCE Riverside Crop Production and Entomology Advisor, talked about Winter Insect Control in Alfalfa.



Jose Aguiar, UCCE Riverside Vegetable Crops and Small Farms Advisor, updated attendees on Vegetable Crop Diseases/Pest Problems in the Coachella Valley.

Small Ruminant Workshop

Location: Farm Credit West, Ag Center Room

485 Business Park Way

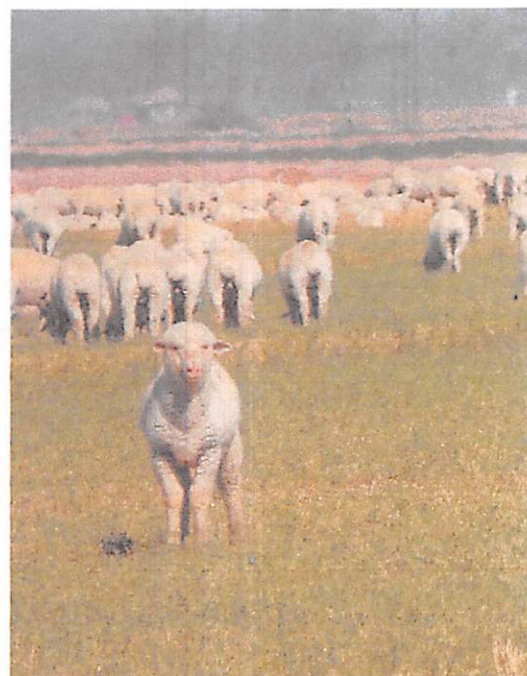
Imperial, CA 92251

Date: Saturday, January 11, 2020

Time: 9:30 AM - 12:00 PM

Cost: Free

Who: Anyone with small ruminants



Agenda Topics:

- **Goats & Sheep 101**—Presented by local veterinarian, Dr. Michelle Buckley (Hidden Rock Large Animal Services)
- **Good record keeping for small ruminants**—Presented by UCCE small ruminant specialist, Dr. Roselle Busch
- **Emergency preparedness for small livestock owners**—Presented by UCCE livestock advisor, Brooke Latack

- Light lunch will be provided
- For additional information, please contact UCCE livestock advisor Brooke Latack at 269-313-2579 or bclatack@ucanr.edu
- *Please feel free to contact us if you need special accommodations*

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LIVESTOCK RESEARCH BRIEF

UC  University of California
CE  Cooperative Extension

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(442) 265-7700

Hello,

This month examines a study looking at the effect of virginiamycin supplementation with two different implant strategies on the productivity of calf-fed Holstein steers during the receiving feeding period.

If you have any comments, questions, recommendations, or know someone who would like to be included on the mailing list, please feel free to contact me.

Best wishes,

Brooke Latack

Livestock Advisor

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Effect of virginiamycin supplementation with two different implant strategies on the productivity of calf-fed Holstein steers during the receiving feeding period

Brooke Latack
Livestock Advisor

Introduction

Virginiamycin is an antimicrobial that can decrease digestive issues related to lactic acidosis in cattle, including liver abscess. The label dosage of 16 mg/kg is meant to control for liver abscess. Supplementation of Virginiamycin has also been found to improve growth performance of calf-fed Holsteins.

Hormonal implants are another strategy to enhance growth performance in cattle. Throughout the feeding period of calf-fed Holstein steers in feedlots, implants are typically used twice to maintain improved performance.

This study aimed to determine the effect of supplementing calf-fed Holstein steers with Virginiamycin and two different implant programs on production.

Methods

120 calf-fed Holstein steers (287 kg) housed at UC DREC were sorted into 20 pens (6 steers per pen) for a 197d feeding period. Steers were fed a steam-flaked corn-based diet (Table 1). Treatments were:

1. 0 mg/kg Virginiamycin + a single implant of Synovex One
2. 16 mg/kg Virginiamycin + a single implant of Synovex One
3. 0 mg/kg Virginiamycin + two implants of Synovex Plus (d1 and d112)
4. 16 mg/kg Virginiamycin + two implants of Synovex Plus (d1 and d112)

Results and Implications

Treatment effects are shown in Table 2. There were no treatment interactions.

Overall virginiamycin supplementation increased ADG by 6.8%, gain efficiency by 6.1%, and carcass weight by 4%. Results from this study were similar to other studies examining Virginiamycin supplementation at higher concentrations than the current study.

The re-implant program led to an increase in ADG during the initial 112d feeding period (8.3%) and overall (2.9%), which was likely due to increased dry matter intake and efficiency of energy use compared to the single, long-term implant program. The re-implant program also increased carcass weight by 2.8%, but decreased marbling score by 9.1% compared to the single implant program.

Liver abscess incidence was low across all treatments (5.8%).

Table 1.
Ingredient composition
of experiment diet

Ingredient Composition	
Basal diet for all treatments	
Item	
Steam-flaked corn	68.00
DDGS	10.00
Sorghum sudan	8.00
Alfalfa hay	4.00
Molasses, cane	4.00
Yellow grease	2.50
Limestone	1.68
Urea	1.15
Trace mineral salt	0.40
Magnesium oxide	0.15
Dicalcium phosphate	0.10

Table 2.
Growth performance
treatment effects

Item	Single, long-term implant		Two implants	
	0 mg/kg VM	16 mg/kg VM	0 mg/kg VM	16 mg/kg VM
Weight, kg				
Initial	286	289	288	286
Final	566	586	586	607
ADG, kg				
1-197 d	1.42	1.51	1.52	1.63
DMI, kg/d				
1-197 d	8.82	8.86	9.03	9.23
ADG/DMI				
1-197 d	0.161	0.171	0.168	0.177
Dietary NE, Mcal/kg				
Maintenance	1.00	1.04	1.02	1.06
Gain	0.98	1.05	1.03	1.07
Carcass weight (kg)	346	357	353	371
Marbling score	4.59	4.37	3.88	4.27
Abscessed liver (%)	10.0	0.00	6.67	12.0

References

Latack, B.C., Buenabad, L., and Zinn, R. A. Influence of virginiamycin supplementation on growth performance, carcass characteristics, and liver abscess incidence, with 2 different implant strategies in calf-fed Holstein steers. 2019. *Applied Animal Sciences*, 35, 628-633.

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CDFA'S CLIMATE SMART AGRICULTURE INCENTIVE PROGRAMS

Kristian Salgado, Community Education Specialist 2 – Climate Smart Agriculture

The California Department of Food and Agriculture (CDFA) has three Climate Smart Agriculture (CSA) incentive programs— The State Water Efficiency and Enhancement Program (SWEET), the Healthy Soils Program (HSP), and the Alternative Manure Management Program (AMMP) that financially assist California farming operations to adopt on-farm practices and technologies that produce tangible benefits for farmers, consumers, and the environment. The CDFA's incentive programs are key to California's climate strategy to reduce greenhouse gas emissions 40 percent by 2030 and carbon neutrality by 2045 relative to 1990 levels. For farming operations interested in applying for HSP or AMMP, the 2020 solicitation period is just around the corner. Both the 2020 HSP and AMMP solicitation periods are anticipated to open at the end of January or early February and will run until March 2020.

The Healthy Soils Program funds California implementation of conservation management practices that improve soil health, sequesters carbon, and reduce atmospheric greenhouse gases. HSP is a competitive grant with the maximum award of \$100,000 that funds 28 eligible soil management practices, such as cover crops, compost application, and nutrient management, just to name a few.

The Alternative Manure Management Program is geared towards commercial dairy and livestock operations that would like to adapt technologies and management practices that reduce their methane emissions. These practices included pasture-based management, alternative manure treatment and storage, solid separation, and conversion from a flush to scrape manure collection system. CDFA will fund a maximum AMMP grant award of \$750,000 per project.

For more information about these individual grants please visit the CDFA's Office of Environmental Farming and Innovation at <https://www.cdfa.ca.gov/oefi/>.

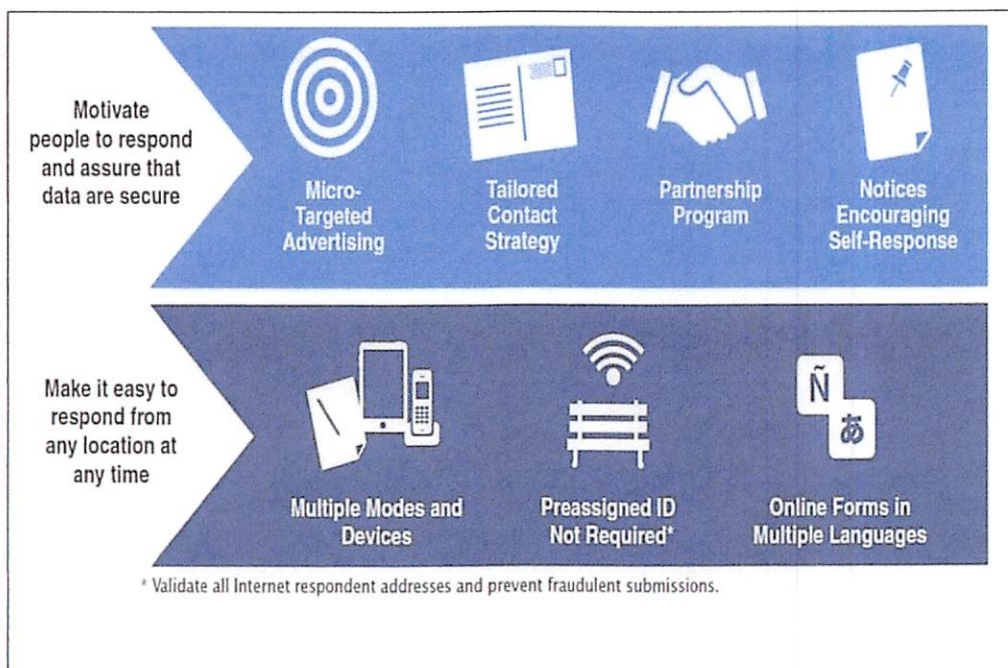
The Imperial County Farm Bureau in partnership with the University of California Cooperative Extension (UCCE) – Imperial County will be hosting HSP and AMMP workshops during the month of February to provide technical assistance to agriculture operations that are interested in applying for these grants. These

workshops are an opportunity to learn about practices that comply with the incentive programs, understand how to complete the online grant application process and receive one-on-one technical assistance.

If you have any questions about the HSP and/or AMMP grant or would like to know more information about the workshops, please contact: *Brea Mohammed, Imperial County Farm Bureau; brea@icfb.net, Oli Bachie (HSP), obachie@ucanr.edu, Brooke Latack (AMMP), bclatack@ucanr.edu, or Kristian Salgado, Community Education Specialist, kmsalgado@ucanr.edu*. Potential applicants are encouraged to attend one or more of the scheduled workshops. Detailed announcements will follow.

2020 Will be easier than ever

Internet – Phone – Paper Form



March 12th-20th the first date to internet self response

- **March 12-20:** An invitation to respond online to the 2020 Census. (Some households will also receive paper questionnaires.)
- **March 16-24:** A reminder letter.

If you haven't responded yet:

- **March 26-April 3:** A reminder postcard
- **April 8-16:** A reminder letter and paper questionnaire
- **April 20-27:** A final reminder postcard before we follow up in person

APPENDIX A:

50 WAYS CENSUS DATA ARE USED

- Decision making at all levels of government.
- Drawing federal, state, and local legislative districts.
- Attracting new businesses to state and local areas.
- Distributing over \$675 billion annually in federal funds and even more in state funds.
- Forecasting future transportation needs for all segments of the population.
- Planning for hospitals, nursing homes, clinics, and the location of other health services.
- Forecasting future housing needs for all segments of the population.
- Directing funds for services for people in poverty.
- Designing public safety strategies.
- Development of rural areas.
- Analyzing local trends.
- Estimating the number of people displaced by natural disasters.
- Developing assistance programs for American Indians and Alaska Natives.
- Creating maps to speed emergency services to households in need of assistance.
- Delivering goods and services to local markets.
- Designing facilities for people with disabilities, the elderly, or children.
- Planning future government services.
- Planning investments and evaluating financial risk.
- Publishing economic and statistical reports about the United States and its people.
- Facilitating scientific research.
- Developing “intelligent” maps for government and business.
- Providing proof of age, relationship, or residence certificates provided by the Census Bureau.
- Distributing medical research.
- Reapportioning seats in the House of Representatives.
- Planning and researching for media as background for news stories.
- Drawing school district boundaries.
- Planning budgets for government at all levels.
- Spotting trends in the economic well-being of the nation.
- Planning for public transportation services.
- Planning health and educational services for people with disabilities.
- Establishing fair market rents and enforcing fair lending practices.
- Directing services to children and adults with limited English proficiency.
- Planning urban land use.
- Planning outreach strategies.
- Understanding labor supply.
- Assessing the potential for spread of communicable diseases.
- Making business decisions.
- Understanding consumer needs.
- Planning for faith-based organizations.
- Locating factory sites and distribution centers.
- Distributing catalogs and developing direct mail pieces.
- Setting a standard for creating both public and private sector surveys.
- Evaluating programs in different geographic areas.
- Providing genealogical research.
- Planning for school projects.
- Developing adult education programs.
- Researching historical subject areas.
- Determining areas eligible for housing assistance and rehabilitation loans.

IMPERIAL VALLEY CIMIS REPORT AND UC WATER MANAGEMENT RESOURCES

Ali Montazar, Irrigation & Water Mgmt Advisor, UCCE Imperial & Riverside Counties

The reference evapotranspiration (ET_0) is derived from a well-watered grass field and may be obtained from the nearest CIMIS (California Irrigation Management Information System) station. CIMIS is a program unit in the Water Use and Efficiency Branch, California Department of Water Resources that manages a network of over 145 automated weather stations in California. The network was designed to assist irrigators in managing their water resources more efficiently. CIMIS ET data are a good guideline for planning irrigations as bottom line, while crop ET may be estimated by multiplying ET_0 by a crop coefficient (K_c) which is specific for each crop.

There are three CIMIS stations in Imperial County include Calipatria (CIMIS #41), Seeley (CIMIS #68), and Meloland (CIMIS #87). Data from the CIMIS network are available at:

<http://www.cimis.water.ca.gov/>. Estimates of the average daily ET_0 for the period of January 1st to March 31st for the Imperial Valley stations are presented in Table 1. These values were calculated using the long-term data of each station.



Table 1. Estimates of average daily potential evapotranspiration (ET_0) in inch per day

Station	January		February		March	
	1-15	16-31	1-15	16-28	1-15	16-31
Calipatria	0.09	0.10	0.12	0.13	0.16	0.19
El Centro (Seeley)	0.10	0.11	0.13	0.15	0.19	0.22
Holtville (Meloland)	0.09	0.10	0.12	0.14	0.17	0.21

For more information about ET and crop coefficients, feel free to contact the UC Imperial County Cooperative Extension office (442-265-7700). You can also find the latest research-based advice and California water & drought management information/resources through link below:

<http://ciwr.ucanr.edu/>

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