

**IMPERIAL COUNTY**



**AGRICULTURAL CROP &  
LIVESTOCK REPORT**

**2018**



**CELEBRATING OUR INDUSTRY PARTNERS**

# TABLE OF CONTENTS

2	Agricultural Commissioner's Letter
3	2018 Production Summary, Top Ten Commodities & Production Areas
4	Ten Year Comparison of Major Groups
5	Imperial County Farm Bureau
7	Livestock & Apiary Products
8	Field Crops
9	University of California Cooperative Extension
11	Vegetable & Melon Crops
13	Imperial Valley Vegetable Growers Association
15	Fruit & Nut Crops
16	Seed Crops & Nursery Products
17	Sustainable Agriculture
19	2018 Export Commodities: A Closer Look At Our Trading Partners
21	Organic Grower Program & California Agricultural Statistics 2017
22	Weights & Measures

**Agricultural Commissioner**  
Carlos Ortiz

**Assistant Agricultural Commissioner**  
Jolene Dessert

**Deputy Agricultural Commissioners**  
Rachel Garewal  
Nelson Perez  
Margo Sanchez

**Special Projects Coordinator**  
Sandra Mendivil

**Plant Pathologist/ Entomologist**  
Laura Arellano

**Agricultural Biologists**  
Joseph Andreotti  
Nicolas Berg  
David Claverie  
Paul Deol  
Samuel Gretencord  
Kelley Jackson  
Jaciel Lainez  
Jeffrey Lopez  
Julian Lopez  
Germania Mejia  
Ramon Ortega  
Cynthia Paz  
Hiram Rocha  
Francisco Rodriguez  
Ashley Romero  
Heriberto Sanchez  
Baldev Singh\*  
Brenda Suarez  
Sandra Torres  
Reyes Triviso  
Antonio Venegas

**Office Supervisor**  
Monica Shelton\*

**Clerical**  
Samantha Bogenholm  
Maria Luera\*  
Lupe Orozco  
Sandy Pereda

\*Not Pictured

Cover Photo by Cynthia Paz





Office of the  
**Agricultural Commissioner**  
**Sealer of Weights & Measures**

Carlos Ortiz  
Agricultural Commissioner  
Sealer of Weights & Measures

Jolene Dessert  
Asst. Agricultural Commissioner  
Asst. Sealer of Weights & Measures

September 24, 2019

Karen Ross, Secretary  
California Department of Food and Agriculture

and

The Honorable Board of Supervisors  
County of Imperial

Ryan E. Kelley, Chairman  
Jesus E. Escobar      Luis A. Plancarte  
Michael W. Kelley      Raymond Castillo

and

County Executive Officer  
County of Imperial

Tony Rouhotas, Jr.

I am pleased to present the 2018 Imperial County Agricultural Crop and Livestock Report in accordance with the requirements of Section 2279 of the California Food and Agricultural Code. This report summarizes the estimated acreage, yield, and gross value of Imperial County's agricultural production for the 2018 calendar year. Also included is a report on sustainable agriculture pursuant to Section 2272 of the California Food and Agricultural Code.

The values presented in this report represent the gross value for products and do not reflect the cost of production, marketing, storage, or transportation. No attempt is made to reflect the net income, profit, or loss to producers.

Gross production for 2018 was valued at \$2,226,031,000. This is an increase of \$160,431,000 (7.77%) compared to the 2017 gross value of \$2,065,600,000. The increase was mainly due to an increase in some field crop prices as well as livestock prices. Alfalfa and Bermuda hay had higher prices. The increase in number and price for cattle also contributed to the increase.

Cattle ranked as our #1 commodity with a gross value of \$469,832,000 which is an increase of 21.35% from 2017. This was due to a 9.91% increase in number of head and 8.03% increase in market price. Alfalfa moved from #3 in 2017 to #2 and Bermuda grass from #11 in 2017 to #7 in 2018 mainly due to better market prices and increase in harvested acres.

In 2018, there was a decrease of 2,080 total harvested acres, down 0.39% from 2017. Seed and Nursery Products saw a significant decrease in harvested acres, down 27.97%. Bermuda Grass seed showed the largest decrease of harvested acres, down 57.32% with a decrease of 11,934 acres. Field Crops, Vegetable & Melon Crops and Fruit & Nut Crops saw a slight increase in harvested acres.

Thank you to all the growers, processors, industry groups, and agencies who provided the information and statistics for this report; your help in this effort is truly appreciated. In addition, I would like to express my appreciation to all of the members of my staff for their continued hard work and dedication and particularly to Sandra Mendivil, Special Projects Coordinator, and Cynthia Paz, Agricultural Biologist III, for their work in compiling this annual report.

Sincerely,

Carlos Ortiz  
Agricultural Commissioner  
Sealer of Weights and Measures

# 2018 PRODUCTION SUMMARY

Category	Harvested Acres		Changes in Harvested Acres	Gross Value		Changes in Gross Value
	2017	2018		2017	2018	
Livestock				\$452,708,000	<b>\$532,130,000</b>	17.54%
Field Crops	326,667	<b>341,229</b>	4.46%	\$365,819,000	<b>\$507,849,000</b>	38.83%
Vegetable & Melon Crops	128,769	<b>132,604</b>	2.98%	\$1,018,764,000	<b>\$984,472,000</b>	-3.37%
Fruit & Nut Crops	10,209	<b>10,328</b>	1.17%	\$85,186,000	<b>\$83,909,000</b>	-1.50%
Seed & Nursery Crops	73,627	<b>53,031</b>	-27.97%	\$137,286,000	<b>\$109,210,000</b>	-20.45%
Apiary Products				\$5,837,000	<b>\$8,461,000</b>	44.95%
<b>Total</b>	<b>539,272</b>	<b>537,192</b>	-0.39%	<b>\$2,065,600,000</b>	<b>\$2,226,031,000</b>	7.77%

*Total harvested acres include multiple cropping on individual fields throughout the year.*

## Top Ten Commodities

Rank 2018	Commodity	2018 Gross Value	Rank 2017
1	Cattle	\$469,832,000	1
2	Alfalfa	\$218,455,000	3
3	Leaf Lettuce	\$122,627,000	2
4	Head Lettuce	\$115,162,000	4
5	Broccoli	\$100,982,000	5
6	Onion	\$98,644,000	7
7	Bermuda Grass	\$95,489,000	11
8	Spinach	\$84,291,000	6
9	Alfalfa Seed	\$68,459,000	8
10	Carrots	\$61,296,000	9

## Agricultural Production Areas

Imperial County has three areas of production: Imperial Valley, Bard/Winterhaven & Palo Verde

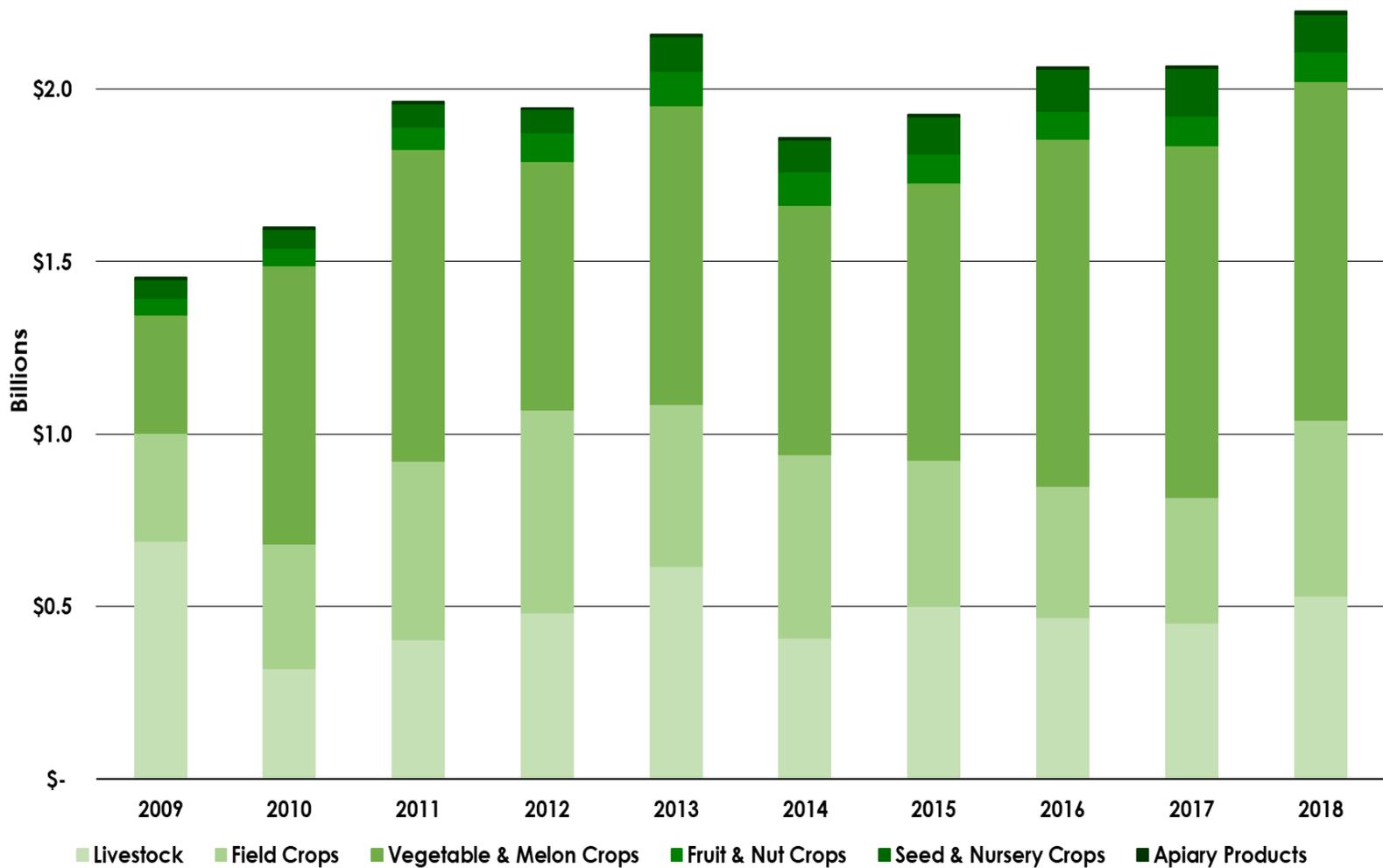
### 2018 Total County Farmable Acres\*

Imperial Valley	456,262
Bard/Winterhaven	14,782
Palo Verde	7,794
<b>Total</b>	<b>478,838</b>

\*Obtained from Imperial Irrigation District, Palo Verde Water District and Bard Water District Reports

# TEN YEAR COMPARISON OF MAJOR GROUPS

\$2.5



Year	Livestock	Field Crops	Vegetable & Melon Crops	Fruit & Nut Crops	Seed & Nursery Products	Apiary Products
2018	\$532,130,000	\$507,849,000	\$984,472,000	\$83,909,000	\$109,210,000	\$8,461,000
2017	\$452,708,000	\$365,819,000	\$1,018,764,000	\$85,186,000	\$137,286,000	\$5,837,000
2016	\$468,176,000	\$381,181,000	\$1,006,345,000	\$80,098,000	\$123,057,000	\$4,357,000
2015	\$502,065,000	\$422,319,000	\$805,021,000	\$83,277,000	\$107,673,000	\$4,779,000
2014	\$410,512,000	\$530,849,000	\$723,260,000	\$95,909,000	\$93,818,000	\$4,441,000
2013	\$617,371,000	\$470,461,000	\$865,401,000	\$100,019,000	\$100,557,000	\$4,708,000
2012	\$483,833,000	\$587,977,000	\$718,219,000	\$85,154,000	\$67,432,000	\$3,144,000
2011	\$403,880,000	\$518,257,000	\$903,959,000	\$64,237,000	\$68,877,000	\$4,877,000
2010	\$321,022,000	\$360,139,000	\$809,126,000	\$51,294,000	\$52,952,000	\$4,001,000
2009	\$690,311,000	\$312,544,000	\$343,201,000	\$47,765,000	\$55,577,000	\$3,562,000

# IMPERIAL COUNTY FARM BUREAU

By Brea Mohamed, Executive Director



For over a century, the Imperial County Farm Bureau has advocated on behalf of the Imperial Valley's agriculture community. Our organization's founding all started on December 18, 1915, when over 1,200 people from all over the Imperial Valley journeyed to Brawley for a meeting to form the Imperial County Farm Bureau. This endeavor was led by W.E. Wills of Brawley, Walter E. Packard of the Meloland experiment station, and A.M. Nelson of El Centro. At the time, cities had formed commercial clubs and chambers of commerce to promote the civic, industrial, and social welfare of

as a rural chamber of commerce, a social gathering place, and an educational organization where one could learn about agricultural experiments from the USDA and UC Cooperative Extension.

Since the Farm Bureau's scope was county-wide, fourteen local associations, called farm centers, were formed, including Acacia, Mt. Signal, Heber, Verde, Eastside, Meloland, Eucalyptus, Seeley, Magnolia, Westmoreland, Mesquite Lake, La Vern, Silsbee, and South Fern. Each farm center had its own set of officers and usually met monthly at the country schoolhouse in that area. Meetings typically included demonstrations and

Farm center meetings were a family affair; they would provide the opportunity to socialize with others in your area, and there would often times be entertainment like music or movies. The presidents of each farm center would act as a director of the Imperial County Farm Bureau and represent the specific needs of their farm center at the county-wide meetings. Even in its early years, Farm Bureau discussed a diverse array of issues, including pest eradication, farm loans, disease control, irrigation problems, and many other topics. The Farm Bureau was not hesitant to let its unified voice be heard. Today, we no longer have farm centers, as improvements in



the urban population, but there was a need for an organization that would represent the interests of the rural and agricultural citizens of the Imperial Valley. At this first meeting, the preliminary plans were laid for an organization that would do just that, the Imperial County Farm Bureau.

By March of the following year, all of the plans were finalized and the organization that has grown to play such a huge role for agriculture in the Imperial Valley was up and running. The Farm Bureau played a unique role in the agricultural community; it acted



talks from the farm advisor, home department, USDA, University of California experiment station, public officials, and many others.



transportation enable members from throughout the Imperial Valley to gather much easier. Our current thirty member board of directors is from all over the Imperial Valley and represents the diverse agriculture industry we have here.

In its early years, when dairies could be found all over the Imperial Valley, Imperial County Farm Bureau had a Cow-Testing Department which was the largest cow-testing association in the world with over 4,000 cows. The tests would show butterfat and milk production. The goal was to help dairymen rid their herds of unprofitable cows.



# CELEBRATING OVER 100 YEARS OF SERVICE

Another department that played a significant role in Farm Bureau's history was the Farm Home Department. The purpose of this department was to help farm women meet war emergencies and improve farm home conditions by learning about new, relevant technologies and practices that could be implemented in the home. The Farm Bureau's home demonstrator would attend all of the farm center meetings to give presentations on subjects like food conservation, canning, planning home gardens, kitchen efficiency, and sanitation.



advocacy, and public relations. For over a century, the Imperial County Farm Bureau has advocated on behalf of the Imperial Valley's agriculture community. Our focus has been on a wide variety of issues that affect the farmers and ranchers in the Imperial Valley, including water, labor, land use, food safety, and a cornucopia of other issues. Our job is to take the needs and concerns we hear from our members and find ways to address them, whether that be by meeting with public officials, putting on a training, or creating an awareness campaign. Farm Bureau is there when you can't be. While some of what we do has evolved since our founding over one hundred years ago, our goal remains the same: to help the success and growth of our county's number one industry.



County Farm Bureau Scholarship, taking place every April. While its purpose has changed, the barbecue still provides an opportunity for members and others to gather, socialize, and enjoy a good meal, just like in old times.

Farm Bureau's main purpose, both then and now, has always been to protect and promote the agricultural interests in the Imperial Valley through education,



Over the years, Farm Bureau hosted many events including its annual barbecue and Farm Bureau Queen contest. While the latter is no longer in existence, it provided joy for many years for the young women who participated. One of our Imperial County Farm Bureau Queens even won the California Farm Bureau Queen contest one year! To this day, Farm Bureau still holds its annual barbecue; however, a couple things have changed. Meals are no longer free, nor are they limited to only members. Instead, the barbecue has evolved into our biggest annual fundraiser for our Imperial



# LIVESTOCK

Item	Year	Production			Value		
		Head	Unit Gain	Total Gain	Unit	Per Unit	Gross Value
<b>Cattle (Feedlot)</b>	<b>2018</b>	<b>379,129</b>	<b>10.27</b>	<b>3,894,412</b>	<b>Cwt</b>	<b>\$120.64</b>	<b>\$469,832,000</b>
	2017	344,937	10.05	3,467,192	Cwt	\$111.67	\$387,170,000
<b>Sheep (Feeders)<sup>1/</sup></b>	<b>2018</b>	<b>*</b>	<b>*</b>	<b>*</b>	<b>Cwt</b>	<b>*</b>	<b>*</b>
	2017	60,000	0.53	31,620	Cwt	\$136.05	\$4,302,000
<b>Sheep (Wool)<sup>2/</sup></b>	<b>2018</b>	<b>**</b>	<b>**</b>	<b>**</b>	<b>Lbs</b>	<b>**</b>	<b>**</b>
	2017	60,000	4.60	276,000	Lbs	\$1.26	\$347,000
<b>Aquatic Products</b>	<b>2018</b>						<b>\$10,244,000</b>
(Fish & Algae)	2017						\$10,494,000
<b>Misc. Livestock</b>	<b>2018</b>						<b>\$52,054,000</b>
	2017						\$50,395,000
<b>Total 2018</b>						<b>Value</b>	<b>\$532,130,000</b>
Total 2017						Value	\$452,708,000

Misc. Livestock may include: Calves, Replacement Cattle, Dairy Animals, Milk, Manure/Compost, Sheep, Wool, California Mid-Winter Fair & Fiesta Show Animals

<sup>1/</sup>\*2018 Sheep (Feeders) is now included in Misc. Livestock

<sup>2/</sup>\*\*2018 Sheep (Wool) is now included in Misc. Livestock

Cwt = 100 Pounds

# APIARY PRODUCTS

Crop	Year	Production			Value		
		Hives	Per Hive	Total Units	Unit	Per Unit	Gross Value
<b>Honey</b>	<b>2018</b>	<b>36,659</b>	<b>10.66</b>	<b>390,624</b>	<b>Lbs</b>	<b>\$1.78</b>	<b>\$694,000</b>
	2017	26,176	10.18	266,404	Lbs	\$1.88	\$500,000
<b>Wax</b>	<b>2018</b>	<b>11,594</b>	<b>1.09</b>	<b>12,583</b>	<b>Lbs</b>	<b>\$2.74</b>	<b>\$35,000</b>
	2017	8,200	0.76	6,259	Lbs	\$3.55	\$22,000
<b>Pollination</b>	<b>2018</b>	<b>107,812</b>			<b>Colony</b>	<b>\$71.72</b>	<b>\$7,732,000</b>
	2017	86,520			Colony	\$61.43	\$5,315,000
<b>Total for 2018</b>						<b>Value</b>	<b>\$8,461,000</b>
Total for 2017						Value	\$5,837,000

# FIELD CROPS

Crop	Year	Production			Unit	Value	
		Harvested Acres	Yield Per Acre	Total		Per Unit	Gross Value
Alfalfa Hay	2018	155,171	7.54	1,169,723	Ton	\$186.76	\$218,455,000
	2017	151,620	6.06	918,768	Ton	\$162.04	\$148,879,000
Bermuda Grass Hay	2018	55,638	10.22	568,757	Ton	\$167.89	\$95,489,000
	2017	52,101	6.50	338,825	Ton	\$149.43	\$50,632,000
Cotton (Lint) <sup>1/</sup>	2018	3,075	3.45	10,614	Bale	\$432.38	\$4,589,000
	2017	3,109	4.32	13,432	Bale	\$397.75	\$5,343,000
Cotton (Seed)	2018			4,130	Ton	\$150.00	\$619,000
	2017			4,653	Ton	\$181.20	\$843,000
Klein Grass Hay	2018	17,932	13.03	233,564	Ton	\$175.80	\$41,061,000
	2017	14,510	8.45	122,624	Ton	\$169.00	\$20,723,000
Pastured Crops <sup>2/</sup>	2018	43,371			Acre	\$39.38	\$1,708,000
	2017	38,509			Acre	\$34.12	\$1,314,000
Straw (Baled)	2018			128,499	Ton	\$37.23	\$4,785,000
	2017			140,151	Ton	\$36.65	\$5,136,000
Sudan Grass Hay	2018	53,562	6.41	343,094	Ton	\$153.63	\$52,708,000
	2017	48,331	5.62	271,637	Ton	\$175.88	\$47,776,000
Sugar Beets	2018	24,417	47.73	1,165,423	Ton	\$47.08	\$54,868,000
	2017	24,929	45.07	1,123,667	Ton	\$47.70	\$53,599,000
Wheat	2018	24,932	3.43	85,530	Ton	\$157.50	\$13,471,000
	2017	23,441	3.21	75,324	Ton	\$223.90	\$16,865,000
Misc. Field Crops	2018	6,502					\$20,096,000
	2017	8,626					\$14,709,000
<b>Total 2018</b>	<b>Acres</b>	<b>341,229</b>				<b>Value</b>	<b>\$507,849,000</b>
Total 2017	Acres	326,667				Value	\$365,819,000

Misc. Field Crops may include: Barley, Field Corn, Flax, Mixed Grasses, Oat, Ryegrass, Safflower, Sesbania, Sorghum Grain, Sorghum Silage, Sugar Beet Pulp, Sugar Beet Molasses, Sugarcane, Triticale

<sup>1/</sup>Cotton Bales = 500 Pounds

<sup>2/</sup>Pastured Crops are pastured once and the acreage is not included in the total and may include: Alfalfa, Bermuda Grass, Permanent Pasture

# UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION

By Oli Bachie, County Director

## UC CE

The University of California Cooperative Extension (UCCE) has served the Imperial County and its neighboring regions since it was established in 1916. The mission of UCCE is to discover and advance knowledge of new agricultural practices and technology, nutrition, family and consumer sciences. It also provides leadership in the dissemination and application of research-based knowledge to the people of the Imperial County. The goal of the UCCE is to be a county department widely known and recognized for excellence at the local, regional and state level. UCCE generates, distributes and applies knowledge to ensure agriculture sustainability, climate resilience and to improve urban lifestyle through development, evaluation and implementation of educational and research tools in the areas of food production, irrigation water and nutrition safety as well as resource management. It is also committed to protect and preserve the natural systems of our desert ecosystem.

The UCCE is one of 58 UC Extension offices. Current agriculture programs within the UCCE include Agronomy, Irrigation and Water Management, Livestock, and Weed Science. The Youth, Families and Communities (YFC) program includes CalFresh, Healthy Living, and 4H Club. Information is developed, tested and presented on these subjects by the department's advisors, research scientists, community education specialist and by their staff research associates, lab, and field assistants.

In the area of Irrigation/Water Management and Water Quality, the program advisor conducts integrated applied research and educational programs on on-farm water management and best conservation practices. The program helps enhance water and nutrient use efficiency through emerging irrigation technologies and user-friendly tools. This helps reduce soil salinization, and improve water quality in Imperial Valley drains and rivers. Dr. Ali Montazar who currently runs the program addresses soil salinity, irrigation, water use efficiency, and water quality



UCCE Imperial County advisors: Oli Bachie, Yu Meng, Brooke Latack and Ali Montazar



Soil moisture sensing (alfalfa field) and monitoring crop canopy development (sugar beet field) in Imperial County

related issues pertaining to the federally mandated Clean Water Act Total Maximum Daily Load (TMDL) standards in the County.

The Agronomy program is led by Dr. Oli Bachie who also serves as the County Director. The program conducts applied research with the primary focus on field and bio-energy crops and their cropping systems. Of the many



Giant King Grass at DREC research field

# CELEBRATING OVER 100 YEARS OF SERVICE



*Holstein cattle part of research trials held at the UC DREC feedlot.*

applied research projects conducted under Dr. Bachie, the Giant King Grass, Rhodes grass and recently Quinoa crop are being tested for adaptability and potential use as alternative crops in the low desert. An issue of agronomy that recently dominated the low desert farming community is industrial hemp. The agronomy program intensively worked on educating interested growers and the industry on industrial hemp and its potential productivity in the low desert to cross pollination and its effects on neighboring cannabis sativa growers.

The Livestock program, led by Brooke Latack, addresses issues pertaining to the livestock industry through research and extension, addressing production, animal health, environmental, community, food safety, legislative and economic issues as related to local livestock production. Research and extension work have been apparent with the cattle and sheep industries of the Imperial Valley. These issues are currently addressed through seven nutrition and heat adaptation studies, preparing and releasing relevant monthly livestock newsletters, and conducting workshops for local farmers. Ms. Latack recognizes forage production and quality, food safety, and animal productivity as a critical part of her livestock program and spends her time researching in these areas.

The Youth, Family, and Communities Program, led by Dr. Yu Meng, has a historic mission to promote democratic participation in civic life, help local residents gain the power and means to shape their lives, families, and communities and pursue the health and well-being of families and individuals. Dr. Meng academically oversees two statewide programs implemented locally: the 4-H Positive Youth Development Program and the UC CalFresh Healthy Living Program. Dr. Meng also collaborates with the Desert Research and Extension Center to improve the Farm Smart program. The 4-H club offers research based experimental programs for diverse youth ages 5-19, focused around the core content of civic engagement, healthy living, agriculture, leadership, and STEM using a "learn-by-doing" educational model. The program serves 8,810 youth and 366 adult

volunteers and reaches more than 6,000 people at various events during the year. The UC CalFresh community educators directly educate 4,600 students and adult participants at 20 sites in Imperial County.

UCCE conducts applied research, as well as grower needs assessments to base its upcoming research project. It also provides extension education and information transfer to the its clientele groups which include growers, PCAs, irrigators, farm industry, ranchers, feedlots and communities in general. The UCCE hosts an annual Fall Desert Crops Workshop which attracts many scientists, not only from UCCE Imperial, but also other parts of the state, Arizona and Mexico. The workshop offers scientific presentations to the low desert crop growers.

As a higher education institution, the UCCE advisors mentor interns from the Imperial Valley College and nearby colleges and universities as well as hire upper level students for summer field and lab employment to help them gain experiences for future career positions.

Other notable extension work of the UCCE farm extension is the monthly newsletter "Imperial Ag Brief" which is published monthly. The UCCE serves over 450 growers of which 36 farms are organic with an average size of 1,225 acres and over half a million-acre irrigated land. The UCCE also produces the widely used crop production guidelines (Vegetable Crop and Field Crop).



*Youth participating 4H and CalFresh Healthy Living Programs*

# VEGETABLE & MELON CROPS

Crop	Year	Production				Value	
		Harvested Acres	Yield Per Acre	Total Units	Unit	Per Unit	Gross Value
Broccoli (Market)	2018	13,726	460.22	6,316,932	26 Lbs	\$15.99	\$100,982,000
	2017	13,785	442.11	6,094,475	26 Lbs	\$15.56	\$94,806,000
Cabbage (Market)	2018	2,044	777.25	1,588,700	45 Lbs	\$13.71	\$21,777,000
	2017	1,949	642.65	1,252,524	45 Lbs	\$21.62	\$27,079,000
<b>Carrots</b>							
Market	2018	4,764	932.29	4,441,707	50 Lbs	\$3.15	\$13,977,000
	2017	4,940	975.76	4,820,247	50 Lbs	\$2.75	\$13,264,000
Processing & Other	2018	11,117	26.41	293,541	Ton	\$161.20	\$47,319,000
	2017	11,525	31.64	364,677	Ton	\$114.53	\$41,765,000
<b>Total Carrots</b>	2018	15,881					\$61,296,000
	2017	16,465					\$55,029,000
Cauliflower (Market)	2018	5,091	645.00	3,283,695	23 Lbs	\$12.12	\$39,794,000
	2017	4,794	740.75	3,551,135	23 Lbs	\$12.91	\$45,858,000
<b>Head Lettuce</b>							
Naked Pack	2018			2,274,594	50 Lbs	\$9.27	\$21,076,000
	2017			2,221,335	50 Lbs	\$9.71	\$21,558,000
Wrap Pack	2018			5,686,485	40 Lbs	\$9.13	\$51,934,000
	2017			5,553,338	40 Lbs	\$9.35	\$51,938,000
Bulk	2018			4,549,188	50 Lbs	\$9.27	\$42,152,000
	2017			4,442,671	50 Lbs	\$9.71	\$43,116,000
<b>Total Head Lettuce</b>	2018	16,241		12,510,267	Ctn	\$9.21	\$115,162,000
	2017	17,115		12,217,344	Ctn	\$9.54	\$116,612,000
Leaf Lettuce	2018	13,953	404.21	5,639,991	35 Lbs	\$21.74	\$122,627,000
	2017	15,440	645.33	9,963,947	35 Lbs	\$21.85	\$217,717,000
Spring Mix	2018	2,996	9,354.00	28,027,390	Lbs	\$0.58	\$16,256,000
	2017	2,557	11,912.67	30,460,689	Lbs	\$0.56	\$17,004,000

Spring Mix may include: Green, Red and Baby Leaf Lettuce, Mizuna, Mustard

# VEGETABLE & MELON CROPS

Crop	Year	Production			Unit	Value Per Unit	Gross Value
		Harvested Acres	Yield Per Acre	Total Units			
<b>Onions</b>							
Market	2018	4,708	2,377.35	11,192,554	50 Lbs	\$6.60	\$73,834,000
	2017	4,153	1,668.75	6,930,319	50 Lbs	\$7.77	\$53,829,000
Processor	2018	7,852	19.51	153,161	Ton	\$161.98	\$24,810,000
	2017	8,934	18.53	165,547	Ton	\$152.46	\$25,240,000
<b>Total Onions</b>	<b>2018</b>	<b>12,560</b>					<b>\$98,644,000</b>
	2017	13,087					\$79,069,000
<b>Potatoes</b>	<b>2018</b>	<b>2,087</b>	<b>250.95</b>	<b>523,733</b>	<b>Cwt</b>	<b>\$34.93</b>	<b>\$18,294,000</b>
	2017	1,589	491.33	780,721	Cwt	\$17.99	\$14,044,000
<b>Spinach</b>	<b>2018</b>	<b>8,585</b>	<b>11,431.54</b>	<b>98,139,768</b>	<b>Lbs</b>	<b>\$0.86</b>	<b>\$84,291,000</b>
	2017	9,619	11,160.38	107,351,678	Lbs	\$0.79	\$84,450,000
<b>Sweet Corn</b>	<b>2018</b>	<b>8,569</b>	<b>358.00</b>	<b>3,067,702</b>	<b>50 Lbs</b>	<b>\$13.22</b>	<b>\$40,540,000</b>
	2017	7,300	331.52	2,420,096	50 Lbs	\$16.01	\$38,754,000
<b>Romaine Lettuce</b>	<b>2018</b>	<b>7,787</b>	<b>750.75</b>	<b>5,846,099</b>	<b>35 Lbs</b>	<b>\$9.47</b>	<b>\$55,371,000</b>
	2017	7,867	419.73	3,301,985	35 Lbs	\$14.68	\$48,480,000
<b>Misc. Vegetables</b>	<b>2018</b>	<b>16,098</b>					<b>\$156,688,000</b>
	2017	10,349					\$134,702,000
<b>Cantaloupes</b>	<b>2018</b>	<b>4,330</b>	<b>635.09</b>	<b>2,749,956</b>	<b>40 Lbs</b>	<b>\$8.90</b>	<b>\$24,481,000</b>
	2017	4,790	536.12	2,568,015	40 Lbs	\$9.25	\$23,762,000
<b>Honeydew &amp; Misc. Melons</b>	<b>2018</b>	<b>1,241</b>	<b>692.13</b>	<b>858,927</b>	<b>40 Lbs</b>	<b>\$11.95</b>	<b>\$10,261,000</b>
	2017	1,035	691.49	715,694	40 Lbs	\$13.93	\$9,972,000
<b>Watermelons</b>	<b>2018</b>	<b>1,415</b>	<b>31.92</b>	<b>45,170</b>	<b>Ton</b>	<b>\$398.68</b>	<b>\$18,008,000</b>
	2017	1,028	29.25	30,069	Ton	\$380.00	\$11,426,000
<b>Total 2018</b>	<b>Acres</b>	<b>132,604</b>				<b>Value</b>	<b>\$984,472,000</b>
<b>Total 2017</b>	<b>Acres</b>	<b>128,769</b>				<b>Value</b>	<b>\$1,018,764,000</b>

Misc. Vegetables may include: Artichoke, Arugula, Asparagus, Bok Choy, Celery, Cilantro, Collards, Dill, Eggplant, Endive, Fennel, Gai Lon, Garbanzo Beans, Herbs, Kale, Mint, Mizuna, Mustard, Napa Cabbage, Okra, Oregano, Parsley, Peas, Pepper, Radish, Rapini, Red Beets, Rosemary, Squash, Sweet Basil, Swiss Chard, Tat Soi

# IMPERIAL VALLEY VEGETABLE GROWERS ASSOCIATION

By Kay Pricola, Executive Director

Imperial Valley Vegetable Growers Association (IVVGA) celebrated its 50<sup>th</sup> anniversary in 2018. IVVGA was founded in a time of significant labor issues and are proud of many accomplishments since then for the agricultural industry and county.

⇒ Active in the 160-acre rule, IVVGA fought to defend the water rights for all in the Imperial Valley. We continue to fight for the water rights to include the volume of water needs to maintain this as productive agricultural community, as this is the single biggest issue to our future.

⇒ When the lettuce mosaic virus devastated the iceberg lettuce crop in 1968, IVVGA stepped into solve the crisis.



For a number of years, staff operated a greenhouse in Encinitas to test as many as 70 varieties of lettuce seed for the virus. We continue that same vigilance today by submitting lettuce seed for testing in Davis for every crop of lettuce to be planted in Imperial County.

⇒ A quarter of a century ago the threat of bee cross-pollination of red, white and yellow onions had growers up in arms. IVVGA, again, found a solution with



Isolation map for onion seed production



voluntary onion pinning map. The map is an Imperial Irrigation District map that reflects the exact location of all fields in the irrigation district boundaries. It is maintained on a wall in the IVVGA office as well as on the IVVGA website.

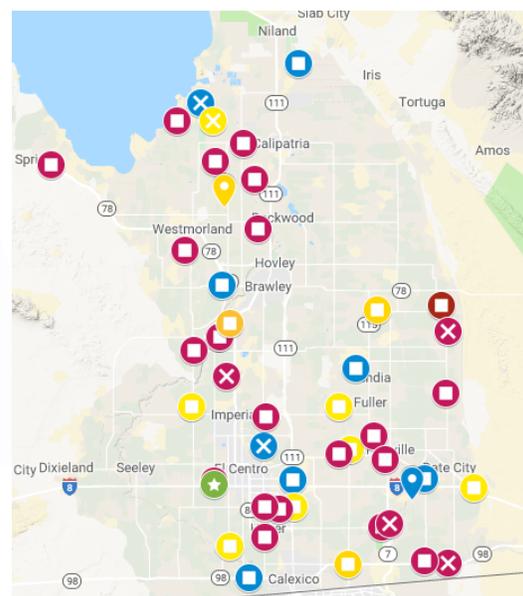
⇒ For 46 years, IVVGA has hosted the ever-popular Stag Barbecue. This event was created for the ag community—who was all male at the time as an event prior to the Elmer Sears Lettuce Golf Tournament. Evolving over the years, it is now a stand alone event and while still named the Stag BBQ, braver women are welcome.

⇒ IVVGA scholarship program, thanks to the generous donations, has grown. It funds the future of agriculture, along with other entities scholarships.

⇒ Food safety is a major focus of all of growers. In 2006, as a result of an *E. Coli* outbreak on spinach originating in another county, our growers worked with other growers within California and in Arizona to form a voluntary safety program that the USDA Food Safety Modernization Act followed as the basis for most food safety programs for vegetables. Unfortunately, both Arizona and other counties in California experienced another *E. Coli* outbreak in romaine lettuce during the 2017-18 growing season. Imperial Valley growers received a clean bill of health, but were affected by the market.

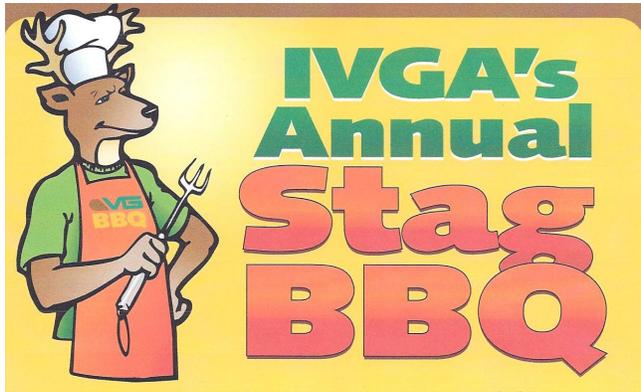
⇒ IVVGA was involved with the formation of the Sweet Onion Commission and the Sweet Onion Festival. The Onion Festival is under the leadership of the City of Imperial and the Sweet Onion Commission faded.

⇒ IVVGA was the first publisher of *Valley Grower* which



Web-based map for onion seed production

# CELEBRATING 50 YEARS OF SERVICE



has continued with a number of editors. Independent from IVVGA it was discontinued just after the turn of the century.

⇒ The Saladero Contest now managed by Imperial Valley Boys & Girls Club, which is a fundraising event that features local produce, was started by and previously managed by IVVGA.

As we look forward, we recognize that some of the challenges 50-years ago remain. California's regulated environment continues to increase and while a major concern, we seem to continue to adapt to those requirements. It only takes one

outbreak to upset the food safety chain and our markets. We, of course, take the illness related to our food production seriously.

IVVGA has a rich history and a bright future because of the commitment of agricultural families. The Board of IVVGA is working for the preservation of our way of life for all the citizens of Imperial Valley. We thank the Imperial County Ag Commissioner and staff for the space in the 2018 Crop Report to highlight those issues and accomplishment.



# FRUIT & NUT CROP

Crop	Year	Production			Unit	Value	
		Harvested Acres	Yield Per Acre	Total		Per Unit	Gross Value
Dates	2018	2,825	3.30	9,321	Ton	\$2,598.83	\$24,224,000
	2017	2,629	3.45	9,080	Ton	\$2,831.33	\$25,712,000
Grapefruit	2018	692	12.08	8,362	Ton	\$486.93	\$4,072,000
	2017	770	10.64	8,190	Ton	\$560.42	\$4,590,000
Lemons	2018	4,612	12.66	58,383	Ton	\$749.27	\$43,745,000
	2017	4,419	11.42	50,444	Ton	\$865.00	\$43,634,000
Tangelos	2018	532	4.76	2,532	Ton	\$553.83	\$1,402,000
	2017	579	4.63	2,680	Ton	\$498.00	\$1,335,000
Tangerines	2018	570	7.50	4,275	Ton	\$754.67	\$3,226,000
	2017	563	5.67	3,190	Ton	\$938.25	\$2,993,000
Misc. Citrus, Fruit & Nut Crops	2018	1,097					\$6,335,000
	2017	1,249					\$5,941,000
Citrus By-Products	2018						\$905,000
	2017						\$981,000
<b>Total 2018</b>	<b>Acres</b>	<b>10,328</b>				<b>Value</b>	<b>\$83,909,000</b>
Total 2017	Acres	10,209				Value	\$85,186,000

Misc. Fruit & Nut Crops may include: Orange, Grape, Lime, Mango, Olives, Pecan, Kumquat, Jujube

# SEED CROPS & NURSERY PRODUCTS

Crop	Year	Production				Unit	Value Per Unit	Gross Value
		Harvested Acres	Yield Per Acre	Total	Total			
<b>Alfalfa Seed</b>								
Non-Certified	2018	10,665	670.17	7,147,328	Lbs	\$2.20	\$15,724,000	
	2017	9,299	677.53	6,300,306	Lbs	\$2.26	\$14,239,000	
Certified	2018	25,937	625.60	16,226,187	Lbs	\$3.25	\$52,735,000	
	2017	35,088	542.77	19,044,550	Lbs	\$3.21	\$61,194,000	
<b>Total Alfalfa Seed</b>	<b>2018</b>	<b>36,602</b>	<b>638.59</b>	<b>23,373,515</b>	<b>Lbs</b>	<b>\$2.93</b>	<b>\$68,459,000</b>	
	2017	44,387	571.00	25,344,856	Lbs	\$2.98	\$75,433,000	
<b>Bermuda Grass Seed</b>								
Non-Certified	2018	4,366	400.78	1,749,796	Lbs	\$4.93	\$8,623,000	
	2017	17,616	245.00	4,315,920	Lbs	\$4.97	\$21,445,000	
Certified	2018	4,520	351.33	1,588,027	Lbs	\$6.00	\$9,528,000	
	2017	3,204	277.38	888,734	Lbs	\$5.05	\$4,485,000	
<b>Total Bermuda Grass Seed</b>	<b>2018</b>	<b>8,886</b>	<b>375.63</b>	<b>3,337,822</b>	<b>Lbs</b>	<b>\$5.44</b>	<b>\$18,151,000</b>	
	2017	20,820	249.98	5,204,654	Lbs	\$4.98	\$25,930,000	
<b>Onion Seed</b>								
	2018	883	331.56	292,765	Lbs	\$7.22	\$2,115,000	
	2017	697	347.71	242,351	Lbs	\$7.27	\$1,762,000	
<b>Misc. Seed &amp; Nursery</b>								
<b>Misc. Non-Certified Seed</b>	<b>2018</b>	<b>2,392</b>					<b>\$4,876,000</b>	
	2017	3,660					\$20,789,000	
<b>Misc. Certified Seed</b>	<b>2018</b>	<b>3,504</b>					<b>\$7,634,000</b>	
	2017	3,448					\$5,690,000	
<b>Misc. Nursery Products</b>	<b>2018</b>	<b>764</b>					<b>\$7,975,000</b>	
	2017	615					\$7,682,000	
<b>Total 2018</b>	<b>Acres</b>	<b>53,031</b>				<b>Value</b>	<b>\$109,210,000</b>	
Total 2017	Acres	73,627				Value	\$137,286,000	

Misc. Seed and Nursery Products may include: Artichoke Seed, Broccoli Seed, Carrot Seed, Celery Seed, Coriander Seed, Fennel Seed, Lettuce Seed, Mustard Seed, Rapeseed, Sudan Seed, Sunflower Seed, Watermelon Seed, Wheat Seed, Aloe Vera, Cut Flowers, Palm Trees, Vegetable Transplants

# SUSTAINABLE AGRICULTURE

## Pest Detection Trapping

This division is mandated to monitor agricultural and urban areas for harmful exotic pests in order to protect the local agricultural industry, environment, the public, and urban landscaping. This is largely accomplished through trapping, visual surveys, and the inspection of incoming nursery stock. The division also provides field inspection services for seed exporters where inspection of mother plants is required and provides pest identification services.

Target Pest	Host Crops	Traps Placed	Annual Services
European Corn Borer	Corn & Sorghum	12	108
Various Exotic Fruit Flies	Fruit Trees & Vegetables	110	1,100
Glassy-winged Sharpshooter	Crops & Ornamentals	486	7,660
Gypsy Moth	Shade Trees	60	419
Japanese Beetle	Turf & Flowers	60	416
Khapra Beetle	Stored Food Products	36	426
Mediterranean Fruit Fly	Fruit Trees	121	4,496
Melon Fruit Fly	Vegetables	121	4,493
Mexican Fruit Fly	Fruit Trees	121	4,500
Oriental Fruit Fly	Fruit Trees	121	4,494

## Pest Detection Survey

Target Pest/Survey Sites	Area Surveyed	Inspections & Finds	Actions
Asian Citrus Psyllid/ Huanglongbing	Residential citrus trees within 2 miles of the international border	700 sites surveyed; 1060 plant samples, 12 insect samples	No action needed
Glassy-winged Sharpshooter	Retail nursery stock shipments	1,277 Inspections; No finds 22 Rejections not due to finds	No action needed Return to origin
	Bulk citrus fruit	136 Inspections; No finds	No action needed
Noxious Weeds/Ag & Urban Puncture Vine, C-rated	772.5 Total miles	18 Total positive sites: 18 Positive sites	10 Sites mechanical removal
Pathogens of concern for export	Seed fields	389 Fields surveyed (by request only)	253 Target pest of concern (listed on certificate)
Red Imported Fire Ant	17 High risk sites	No finds	No action needed

# SUSTAINABLE AGRICULTURE

## Pest Exclusion & Quarantine

This division is mandated to exclude exotic agricultural, urban, and environmental pests and to prevent movement of newly discovered pests within the state. This is accomplished through inspection of incoming agricultural products and enforcement of quarantines that prohibit or restrict the movement of plants, seeds and other items capable of harboring harmful pests. In addition, certificates of quarantine compliance and phytosanitary certificates are issued for commodities originating here, in order to assist growers in moving their products to other counties, states or countries.

### Plant Quarantine

#### Pest Exclusion Inspection ~ Shipments Entering Imperial County

Type of Inspection	Inspections	Pounds	Origin
Field & Vegetable Seed	652	14,064,457	Arizona, California, Idaho, Louisiana, Missouri, North Carolina, Nebraska, Nevada, Ohio, Oregon, Washington
Plants	294	-	Arizona, California, Florida, Pennsylvania, Mississippi, Texas, Tennessee
Bees	4	-	Montana, Utah

### Nursery & Seed Inspection

The goal of the nursery inspection program is to prevent the introduction and spread of agricultural pests through nursery stock and to protect agriculture and the consumer against economic losses resulting from the sale of inferior, defective or pest-infested nursery stock. The seed law enforcement program protects seed consumers by regulation of the marketing of seed, inspection of seed grown or sold locally, verification of purity and germination, investigation of seed complaints, and prevention of the spread of noxious weed seeds through seed products. Also included in this program is the California Certified Seed Program in which superior varieties of seed are grown, processed and distributed under close supervision.

### Nursery Inspections

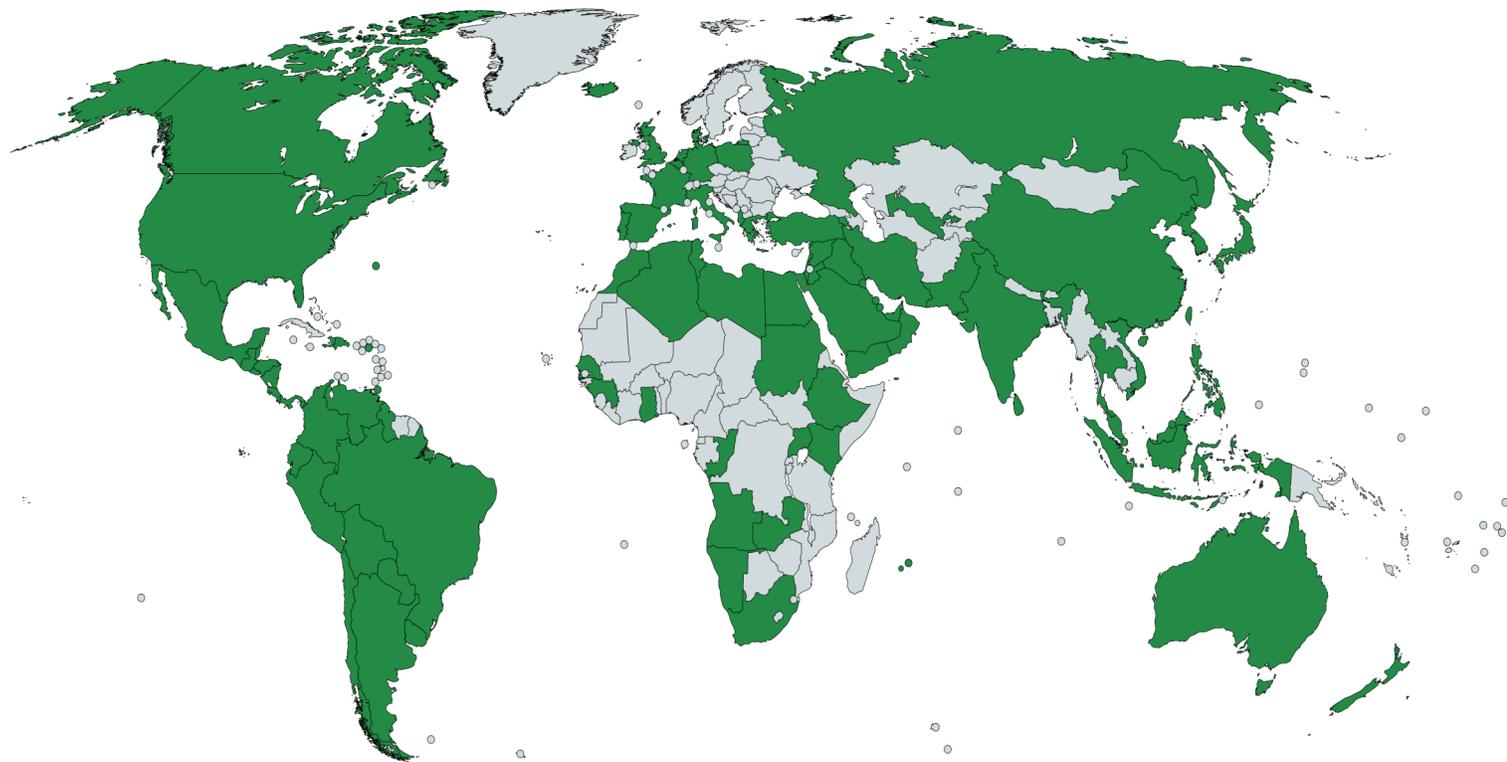
Type of Inspection	Locations	Production Areas	Nursery Stock Type
Production Nursery	25	770.71	Date palms, ornamental trees and shrubs, annuals, fruit trees.
Retail Nursery	2	-	Ornamental trees and shrubs, annuals, fruit trees.

### California Crop Improvement Association Inspections & Certification

Type of Inspection	Inspections
Harvest Equipment	93

Seed Transfer Certification	Inspections
In-state	89
Out of state	41

# 2018 EXPORT COMMODITIES<sup>1/</sup>



## Federal Export Certificates<sup>1/</sup>

18,457 federal certificates issued to 94 countries

92.8% of the certificates issued to 7 countries

Percentage of Certificates Issued per Country			
Japan	40.39%	China	3.26%
Mexico	33.79%	Taiwan	1.98%
Korea	7.17%	United Arab Emirates	1.22%
Canada	4.99%	Other	7.2%

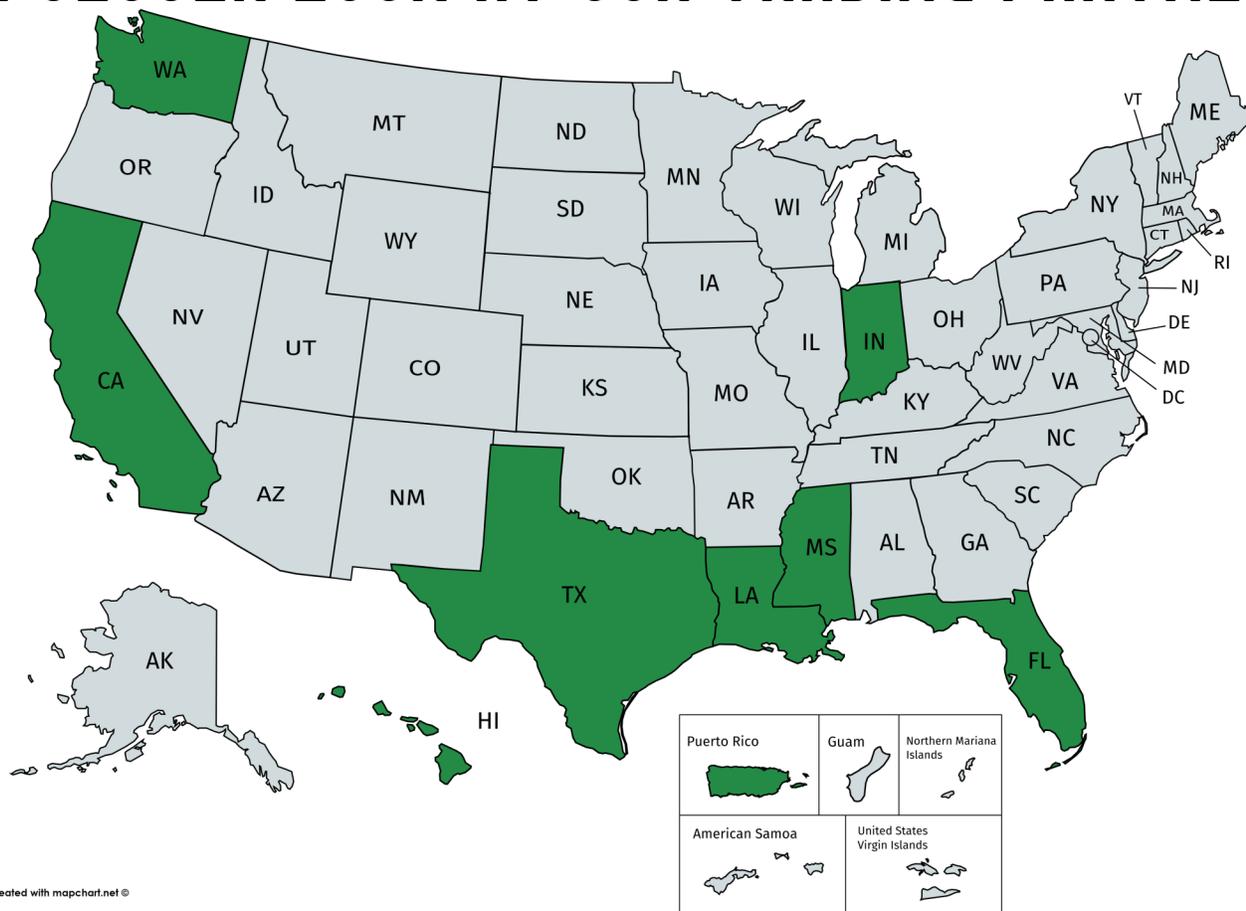
Commodities Exported <sup>2/</sup>	
Hay & Straw	38.5%
Vegetables	37.2%
Other	12.7%
Seeds	11.6%

Countries											
Japan	7455	Sri Lanka	30	Turkey	15	Qatar	7	Paraguay	3	Belgium	1
Mexico	6236	Algeria	27	Iraq	13	Vietnam	6	Senegal	3	Bermuda	1
Republic of Korea	1323	France	26	Spain	12	Dominican Republic	6	Thailand	3	Congo	1
Canada	921	Haiti	26	Sudan	12	Germany	6	Venezuela	3	Denmark	1
China	601	Hong Kong	26	Bolivia	11	Malaysia	6	Angola	2	Guinea	1
Taiwan	366	Singapore	26	New Zealand	11	Syria	6	Bahrain	2	Iceland	1
United Arab Emirates	226	Yemen	25	Panama	11	Guyana	5	Belize	2	Indonesia	1
Australia	219	Pakistan	23	Egypt	10	Portugal	5	Brunei Darussalam	2	Peoples Republic of Korea	1
Saudi Arabia	125	Oman	22	Kenya	10	Uruguay	5	Ethiopia	2	Namibia	1
Peru	81	Italy	21	Kuwait	10	Greece	4	Mauritius	2	Reunion	1
United Kingdom	60	Argentina	20	Guatemala	8	Trinidad & Tobago	4	Poland	2	Russian Federation	1
Jordan	50	Iran	20	Nicaragua	8	El Salvador	3	United States	2	Saint Kitts and Nevis	1
Netherlands	44	India	19	Philippines	8	French Polynesia	3	Uzbekistan	2	Tunisia	1
Colombia	36	Libya	19	Costa Rica	7	Ghana	3	Albania	1	Uganda	1
Chile	33	South Africa	18	Honduras	7	Lebanon	3	Armenia	1	Zambia	1
Ecuador	33	Brazil	17	Israel	7	Morocco	3				

<sup>1/</sup>Based on USDA Phytosanitary Certification Program

<sup>2/</sup>Not all commodities originated in Imperial County

# A CLOSER LOOK AT OUR TRADING PARTNERS



## State Export Certificates<sup>1/</sup>

912 state certificates issued to 9 states and territories

95.2% of the certificates issued to 2 states

States or Territories					
Hawaii	625	California	7	Puerto Rico	3
Florida	243	Washington	5	Indiana	1
Texas	24	Louisiana	3	Mississippi	1

Commodities Exported <sup>2/</sup>	
Vegetables	82.4%
Nursery	16.4%
Hay & Straw	0.6%
Seeds	0.6%

NOTE: Not all U.S. Produce shipments require a phytosanitary certificate

## California and the Global Market Place

According to the 2017-2018 California Agricultural Statistics Review<sup>1/</sup>, California leads the country as the largest agricultural producer and exporter.

- ⇒ California exported approximately 28% of its agricultural production by volume. This translates to \$20.56 billion in value
- ⇒ California is the sole exporter of many agricultural commodities supplying 99% or more of the following:

- › almonds
- › artichokes
- › dates
- › dried plums
- › figs
- › garlic
- › kiwifruit
- › olives and olive oil
- › pistachios
- › raisins
- › table grapes
- › walnuts

### California's Top 10 Agricultural Export Markets

Rank	Country
1	European Union
2	Canada
3	China/Hong Kong
4	Japan
5	Mexico
6	Korea
7	India
8	United Arab Emirates
9	Turkey
10	Vietnam

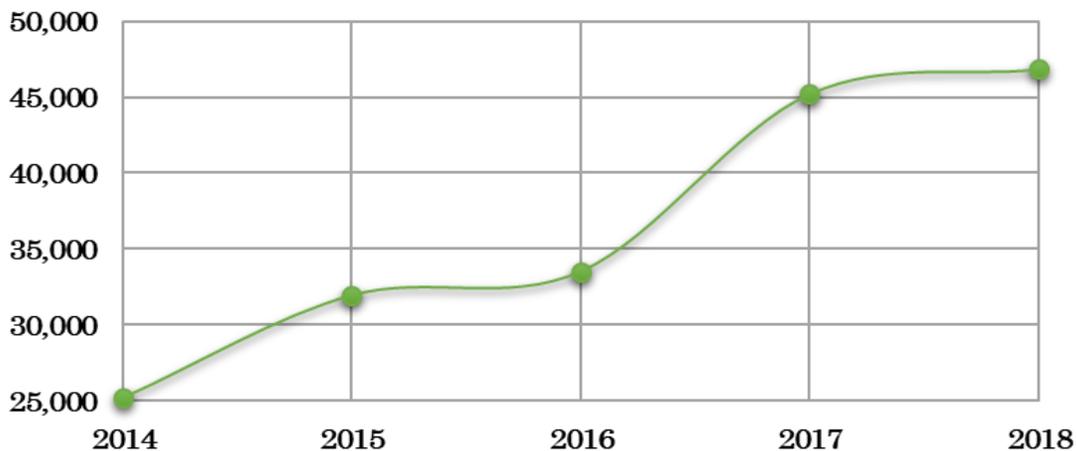
<sup>1/</sup><https://www.cdfa.ca.gov/statistics/>

# ORGANIC GROWER PROGRAM

The Organic Program is responsible for enforcement of the federal Organic Foods Production Act of 1990 and the California Organic Products Act of 2003. These statutes protect consumers, producers, handlers, processors and retailers by monitoring and inspecting fresh commodities grown, labeled or sold as organic.

Year	Producers	Acres	Operations Gross Value
2018	52	46,850	\$181,753,731
2017	55	45,216	\$181,482,000
2016	48	33,505	\$242,403,000
2015	36	31,935	\$275,382,000
2014	28	25,156	\$159,938,000

## Organic Acreage Production 5 Year Comparison

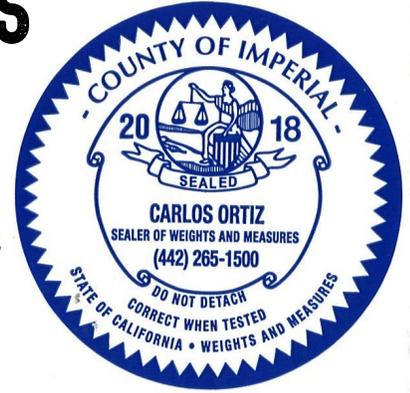


## California Agricultural Statistics - 2017

*California Agricultural Statistics are compiled annually from County Agricultural Commissioner Crop Reports*

- ⇒ In 2017, Imperial County ranked #10 out of 58 California counties with a gross value of agricultural production at \$2,065,600,000.
- ⇒ According to the 2017-2018 review of the 2017 Ag Statistics by CDFA, Imperial County was the sole producer of sugar beets; #1 producer of alfalfa hay, alfalfa seed, Sudan hay, sweet corn, wheat; and among the top five producers of artichokes, broccoli, cabbage, cantaloupes, carrots, cattle & calves, cauliflower, celery, cilantro, dates, grapefruit, honeydew melons, lettuce, onions, potatoes, salad greens, sheep & lambs, spinach, vegetable seeds, and watermelons.
- ⇒ In 2017, California remained the leading state in cash receipts with the leading crops being fruits, nuts and vegetables.

# WEIGHTS & MEASURES



The Weights and Measures Division is responsible for maintaining equity in the marketplace to ensure the transactions made by weight or measure in the county are fair. This protects both the consumer from over paying and the vendor from losing goods. The division registers devices throughout Imperial County and then tests them to make sure they are within tolerance. The division also conducts inspections of petroleum products, quality control, point of sale systems and weighmasters.

Weighing Devices	Locations	Inspections
Computing Scales	57	441
Counter Scales	24	38
Platform Scales <2,000 lb	30	51
Platform Scales 2,000 to 10,000 lb	25	42
Platform Scales >10,000 lb	1	2
Hopper Scales	1	2
Hanging Scales	9	17
Livestock Scales	13	14
Monorail	1	2
Prescription/ Jewelry Scale	12	14
Railway Scale	1	1
Vehicle Scale	91	119

Measuring Devices	Locations	Inspections
Fabric/ Cord/ Wire	16	36
LPG	33	33
Retail Fuel Meters (Gas Pumps)	75	2303
Retail Water Meters	80	129
Vehicle Meters	42	54
Wholesale Meter	3	4





**Carlos Ortiz**

Agricultural Commissioner  
Sealer of Weights & Measures  
852 Broadway  
El Centro, CA 92243  
[www.co.imperial.ca.us/ag](http://www.co.imperial.ca.us/ag)