

Our Citrus Legacy



2015



*Los Angeles County
Crop and Livestock Report*



2015 SUMMARY CHART	
44%	NURSERY PRODUCTS
4%	FLOWERS & FOLIAGE
3%	FRUIT & NUT CROPS
37%	VEGETABLE CROPS
7%	FIELD CROPS
4%	LIVESTOCK PRODUCTION
<1%	APIARY
<.1%	FOREST PRODUCTS

SUMMARY

Commodity	2013	2014	2015
Nursery Products	\$100,612,000	\$123,850,000	\$85,378,000
Flowers & Foliage	\$11,822,000	\$9,345,000	\$7,021,000
Fruit & Nut Crops	\$17,208,500	\$7,965,000	\$5,755,000
Vegetable Crops	\$43,966,000	\$57,830,000	\$71,015,000
Field Crops	\$16,059,400	\$16,903,000	\$13,812,000
Livestock Production	\$8,894,000	\$11,467,000	\$7,977,000
Apiary	\$1,966,340	\$2,320,000	\$1,555,000
Forest Products	\$10,170	\$6,760	\$5,030
TOTAL	\$200,538,410	\$229,686,760	\$192,518,030

MILLION DOLLAR COMMODITIES

01	Root Vegetables	\$60,133,000	08	Indoor Plants, Flowering	\$2,505,000
02	Woody Ornamentals	\$47,960,000	09	Vegetable Plants	\$2,448,000
03	Bedding Plants	\$20,283,000	10	Grain Hay	\$1,920,000
04	Alfalfa Hay	\$11,236,000	11	Honey	\$1,328,000
05	Dairy & Livestock	\$7,977,000	12	Ground Covers	\$1,305,000
06	Orchard Fruits	\$3,732,000	13	Grapes	\$1,012,000
07	Indoor Plants, Foliage	\$3,663,000			

We sincerely thank Maynard Johnson with El Monte Printing for the design layout for this year's crop report. A special word of thanks to all who assisted in creating this edition of the crop report: Public Information Officer Ken Pellman, for researching, writing, editing, and obtaining photos; Khoa Lam for cover photograph and design; Cindy Werner, for research and obtaining photos; the agency of Nuffer, Smith, Tucker for providing citrus images; Elvira Lugo, for generating the complete statistical report and Deputy Agricultural Commissioner Christine Belden for overseeing the process. We also thank the staff of the Environmental Protection Bureau and the staff of the Pest Exclusion and Produce Quality Bureau, including Deputy Director Ed Williams for photographs, Entomologist Dr. Gevork Arakelian and Plant Pathologist Dr. Jerold Turney for gathering and compiling information and providing photographs for this report.



COUNTY OF LOS ANGELES

**Department of
Agricultural Commissioner/
Weights and Measures**



Kurt E. Floren
Agricultural Commissioner
Director of Weights and Measures

12300 Lower Azusa Road
Arcadia, CA 91006-5872
<http://acwm.lacounty.gov>

Richard K. Iizuka
Chief Deputy

**Karen Ross, Secretary
California Department of Food and Agriculture**

and

**The Honorable Board of Supervisors
County of Los Angeles**

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Mark Ridley-Thomas – Second District

Don Knabe – Fourth District

Sheila Kuehl – Third District

Michael D. Antonovich – Fifth District

2015 CROP AND LIVESTOCK REPORT

The total gross value of agricultural crops and commodities produced in Los Angeles County during 2015 was \$192,518,030. Most agricultural products saw a decrease in total sales and acreage devoted to agricultural commodity production. Nursery plant production continues to be the county’s top industry. A 5% decrease in greenhouse square footage, although somewhat mitigated by a field acreage increase of slightly below 3%, resulted in a decrease in nursery industry sales of 45%. The need for nursery plants in urban settings will fluctuate greatly as communities build and landscaping trends change. Factors that may have contributed to the dramatic decrease include exotic pests gaining a foothold despite quarantine efforts and the selling and repurposing of agricultural property.

Certain categories experienced increased sales and/or acreage. Indoor plants and foliage sales increased by almost 60%, root vegetables sales continued the positive trend with an increase of 15% from the previous year, and herbs and miscellaneous vegetables experienced a dramatic increase in recorded sales. Organic farming acreage saw more than a three-fold increase in total devoted acreage, and a near 50% increase in the number of farms.

I would like to express my sincere appreciation to each of the producers and individuals who provided the information for this report. My thanks are extended to the skilled and committed people of this Department who continue to do an extraordinary job in serving and protecting the agricultural community and in compiling these essential statistics.

Respectfully submitted,

Kurt E. Floren
**Agricultural Commissioner/
Director of Weights and Measures**

COUNTY AGRICULTURAL COMMISSIONERS CENTENNIAL, 1881-1981
A 100 YEAR HEADSTART ON THE FUTURE
Paul B. Engler, Commissioner

*Protecting Consumers and the Environment Since 1881
To Enrich Lives Through Effective and Caring Service*

This annual publication presents statistical information on acreage, yield, and gross value of agricultural products produced in Los Angeles County. This is published in accordance with Sections 2272 and 2279 of the California Food and Agricultural Code. The production values in this report represent gross values and do not reflect the cost of production, net income, or loss to producers.

Centennial citrus crate label designed by Loren Clapp & printed by R. Klein in 1981.

FLOWERS & FOLIAGE

Item	Year	Green House Sq Ft	Field Acres	Total Value	
Indoor Plants, Flowering	2015	439,700	2.5	\$2,505,000	▼
	2014	650,000	3.5	\$4,142,000	
Indoor Plants, Foliage	2015	199,800	1.4	\$3,663,000	▲
	2014	161,000	6.2	\$2,308,000	
Miscellaneous*	2015	35,300	63.2	\$853,000	▼
	2014	54,400	78.6	\$2,895,000	
*Includes cacti, chrysanthemums, lilacs, orchids, succulents, and other miscellaneous flowers.					
TOTAL	2015	674,800	67.1	\$7,021,000	▼
	2014	865,400	88.3	\$9,345,000	



NURSERY PRODUCTS

Item	Year	Green House Sq Ft	Field Acres	Total Value	
Woody Ornamentals	2015	4,002,800	898.6	\$47,960,000	▼
	2014	3,250,500	850.9	\$80,883,000	
Bedding Plants	2015	1,166,200	81.1	\$20,283,000	▼
	2014	1,490,000	123.4	\$23,061,000	
Vegetable Plants	2015	84,700	9.2	\$2,448,000	▼
	2014	231,800	3.8	\$2,823,000	
Ground Covers	2015	65,000	8.5	\$1,305,000	▲
	2014	349,000	12.9	\$1,023,000	
Miscellaneous*	2015	781,400	574.1	\$13,382,000	▲
	2014	1,065,400	538.6	\$8,280,000	
*Includes perennials, turf, roses, and other miscellaneous nursery plants.					
TOTAL	2015	6,100,100	1,571	\$85,378,000	▼
	2014	6,386,700	1,530	\$123,850,000	

VEGETABLE CROPS

Item	Year	Acreage	Production per Acre	Production Total	Unit	Value per Unit	Total Value	
Corn	2015	58.2	4.7	270.7	Ton	\$536	\$145,000	▼
	2014	134.5	1.9	249.1	Ton	\$650	\$162,000	
Tomatoes	2015	16.7	6.8	113.8	Ton	\$1,107	\$126,000	▼
	2014	41.6	8.0	333.2	Ton	\$1,297	\$432,000	
Root Vegetables	2015	7,422.1	Includes beets, carrots, dry onions, garlic, potatoes, radishes, turnips, and other root vegetables.				\$60,133,000	▲
	2014	6,168.8					\$52,331,000	
Vine Crops	2015	37.8	Includes cantaloupe, cucumbers, green beans, melons, pumpkins, squash, watermelon, and zucchini.				\$156,000	▼
	2014	69.8					\$421,000	
Table Greens	2015	8.1	Includes alfalfa sprouts, kale, lettuces, oriental specialties, and spinach.				\$177,000	▼
	2014	18.4					\$861,000	
Herbs & Spices	2015	2.5	Includes chives, cilantro, fennel, mint, parsley, thyme, and other herbs & spices.				\$459,000	▲
	2014	1.2					\$37,100	
Miscellaneous	2015	378.7	Includes bell peppers, broccoli, cabbage, cacti, cauliflower, celery, chard, chili peppers, collard greens, mustard greens, eggplant, kohlrabi, leeks, and other misc. vegetables.				\$9,819,000	▲
	2014	330.4					\$3,586,000	
TOTAL	2015	7,924.2					\$71,015,000	▲
	2014	6,414.7					\$57,830,000	



FRUIT AND NUT CROPS

Item	Year	Acreage	Production Per Acre	Production Total	Unit	Value Per Unit	Total Value	
Grapes	2015	340.2	3.7	1,269.0	Ton	\$797	\$1,012,000	▼
	2014	384.7	3.7	1,435.0	Ton	\$790	\$1,134,000	
Strawberries	2015	24.3	14.2	344.2	Ton	\$1,479	\$509,000	▼
	2014	25.3	13.5	340.4	Ton	\$1,789	\$609,000	
Orchard Fruits	2015	301.9	Includes apples, apricots, cherries, grapefruit, mandarins, nectarines, peaches, pears, persimmons, plums, pomegranates, and oranges.				\$3,732,000	▼
	2014	256.0					\$5,476,500	
Miscellaneous	2015	110.2	Includes avocados, berries, figs, guavas, olives, pistachios, prickly pears, and other miscellaneous fruit and nut crops.				\$502,000	▼
	2014	98.1					\$745,100	
TOTAL	2015	776.6					\$5,755,000	▼
	2014	764.1					\$7,965,000	

FIELD CROPS

Item	Year	Acreage	Production per Acre	Production Total	Unit	Value per Unit	Total Value	
Alfalfa Hay	2015	6,241	7.8	48,962	Ton	\$229	\$11,236,000	▼
	2014	6,109	8.2	49,900	Ton	\$265	\$13,212,000	
Grain Hay	2015	3,200	3.0	9,600	Ton	\$200	\$1,920,000	▼
	2014	3,300	3.0	9,900	Ton	\$225	\$2,227,500	
Rangeland	2015	5,695					\$121,000	▲
	2014	4,595					\$91,400	
Miscellaneous*	2015	1,632	Includes grazing privileges on stubble, irrigated pasture, silage, sudan hay, and wheat				\$535,000	▼
	2014	1,738					\$1,372,000	
TOTAL**	2015	11,073**					\$13,812,000	▼
	2014	11,147**					\$16,903,000	

* Acreage excludes stubble.

** Excluding rangeland and stubble.

DAIRY & LIVESTOCK

Item	Year		Total Value	
Dairy & Livestock	2015	Includes dairy cattle, beef cattle, hogs, goats, chickens, milk, goat milk, eggs, etc.	\$7,977,000	▼
	2014		\$11,467,000	



FOREST PRODUCTS

Item	Year		Total Value	
Firewood*	2015	* Figures obtained from USDA Forest Service, Angeles National Forest	\$5,030	▼
	2014		\$6,790	

SUSTAINABLE AGRICULTURE REPORTING ORGANIC FARMING STATISTICS

Year	Farms	Acres
2015	39	583
2014	27	129



APIARY

Item	Year	Production	Unit	Value per Unit	Total Value	
Honey	2015	322,390	Lb.	\$4.12	\$1,328,000	▼
	2014	647,302	Lb.	\$2.00	\$1,392,000	
Beeswax	2015	12,361	Lb.	\$4.76	\$58,800	▲
	2014	13,768	Lb.	\$3.75	\$51,600	
Miscellaneous	2015	Includes pollination fees, etc.			\$169,000	▼
	2014				\$876,200	
TOTAL	2015				\$1,555,000	▼
	2014				\$2,320,000	



Over the years, the county's citrus industry faced droughts, freezes, floods, and insect pests, before it was ultimately overtaken by urban development after thriving for a century. White scale was just the first pest to pose a serious threat in our area, but, subsequently, there have been invasions of California red scale (*Aonidiella aurantia*) and Diaprepes root weevil (*Diaprepes abbreviatus*), along with all-too frequent infestations of various exotic fruit flies, such as Medfly and Oriental Fruit Fly. Our residential areas, which abound with citrus trees in front and backyards, and nurseries are now facing the extremely serious threat posed by the fatal-to-citrus bacterial disease huanglongbing (HLB), vectored by the tiny Asian citrus psyllid and also spread by grafting. After the psyllid was confirmed to be infesting our county in 2009, we braced for HLB. In Hacienda Heights, a single tree with multiple grafts was confirmed to be dying from HLB in 2012, the first appearance in California. Then, in 2015, HLB was confirmed in multiple trees in San Gabriel, where citrus growing began for California, and, as of this writing, infected trees and psyllids continue to be confirmed in our county, fulfilling our worst fears from the psyllid's first detection in California. The remnants of our county's once-staggering display of citrus trees, in which tens of thousands of acres of oranges, lemons, limes, and more stretched across the landscape, will only survive with the dedicated cooperation of agriculture officials, commercial growers, residential property owners, and a lot of luck.



PEST EXCLUSION ACTIVITIES

Pest Exclusion Violations	# of Violations Issued	Pest Exclusion Violations	# of Violations Issued
Markings	838	Cherry Fruit Fly	4
Infested/Presume Infested	492	Noxious Weed Offered for Sale	4
Federal Terminal Inspection Act	416	Peach Rosette Disease	4
Caribbean Fruit Fly	128	Peach Tree Diseases	4
Plum Curculio/Blueberry Maggot	81	Federal (Hawaiian) Quarantine	3
Sweet Potato Weevil	45	Gypsy Moth	3
Japanese Beetle	44	Proof of Ownership	3
Burrowing and Reniform Nematodes	39	Walnut and Pecan Pests	3
Citrus Pests	27	Colorado Potato Beetle	2
Nursery Stock Certificates or Inspection	22	Cornstalk and Sugarcane Borer	2
Cedar Apple Rust	15	Federal Foreign Quarantine Fruits & Vegetables	2
Failure to Hold	9	Hydrilla	2
Sweet Orange Scab	9	Imported Fire Ant	2
Chestnut Bark/Oak Wilt Diseases	8	Light Brown Apple Moth	2
Citrus Canker	8	Ozonium Root Rot	2
European Corn Borer	8	Citrus Black Spot	1
Federal Domestic Quarantine – Fruit Flies	8	Cotton Pests	1
Infested with Seed or Propagule	8	Emerald Ash Borer	1
Citrus Greening/Asian Citrus Psyllid	5	Nut Tree Pests	1
Total Quarantine Code Violations	2,256	Total Shipments Rejected	1,374

PEST EXCLUSION ACTIVITIES – ENTOMOLOGY LABORATORY

PEST INTERCEPTED Latin Name	PEST INTERCEPTED Common Name	MATERIAL	SOURCE*	# of INTERCEPTIONS
<i>Aceria annonae</i>	Eriophyid mite	Soursop	Quar	1
<i>Agallia sp.</i>	Leafhopper	Cut foliage	Quar	2
<i>Agrilus coxalis</i>	Goldspotted oak borer	Coast live Oak	Pub	1
<i>Aleurodicus dispersus</i>	Spiraling whitefly	Betel	Quar	2
<i>Aleurodicus pulvinatus</i>	Whitefly	Soursop	Quar	1
<i>Allonemobius sp.</i>	Cricket	Sweet potato	Quar	1
<i>Androthrips sp</i>	Thrips	Taro	Quar	1
<i>Aonidiella aurantii</i>	California red scale	Nursery/Plants/Citrus	Nurs/Quar	4
<i>Araecerus coffeae</i>	Coffee bean weevil	Dracaena	Quar	1
<i>Atherigona orientalis</i>	Muscid fly	Ginger	Quar	3
<i>Aulacaspis alisiana</i>	Armored scale	Mango	Quar	1
<i>Bambusaspis miliaris</i>	Robust bamboo pit scale	Bamboo	Quar	2
<i>Blastodacna sp.</i>	Moth	Crab apples	Quar	1
<i>Bradybaena similaris</i>	Snail	Cut foliage	Quar	8
<i>Cacographis osteolalis</i>	Crambid moth	Sweet potato	Quar	1
<i>Ceroplastes floridensis</i>	Wax scale	Ficus	Quar	1
<i>Ceroplastes sp.</i>	Wax scale	Cut foliage	Quar	4
<i>Ceroplastes stellifer</i>	Stellate scale	Cut foliage	Quar	1
<i>Chrysodeixis eriosoma</i>	Green garden looper	Cut foliage	Quar	4
<i>Clavaspis herculeana</i>	Armored scale	Cut foliage	Quar	1
<i>Coccus sp.</i>	Soft scale	Cut foliage	Quar	1
<i>Conocephalus saltator</i>	Longhorned grasshopper	Thai Basil	Quar	1
<i>Conotrachelus juglandis</i>	Weevil	Chestnut	Quar	1
<i>Cylas formicarius</i>	Sweet potato weevil	Sweet potato	Quar	46
<i>Delottococcus confusus</i>	Mealybug	Cut flowers	Quar	3
<i>Dendrothrips howei</i>	Thrips	Xylosma	Nurs	1
<i>Dismicoccus grassii</i>	Mealybug	Ficus	Quar	3
<i>Eumerus figurans</i>	Ginger maggot	Ginger roots	Quar	2
<i>Euphyllura olivina</i>	Olive psyllid	Olive	Nurs	1
<i>Euscepes postfasciatus</i>	West Indian Sweet potato weevil	Sweet potato	Quar	14
<i>Euwallacea sp.</i>	Ambrosia beetle	Cut flowers	Quar	1
<i>Ferrisia dasyliirii</i>	Mealybug	Cherimoya/Cut flowers	Quar	3
<i>Ferrisia sp.</i>	Mealybug	Cherimoya/Taro	Quar	2
<i>Frankliniella schultzei</i>	Thrips	Rose	Nurs	1
<i>Frankliniella tritici</i>	Thrips	Cut foliage	Quar	1
<i>Gynaikothrips uzeli</i>	Weeping ficus thrips	Weeping fig	Nurs/Pub	2
<i>Gyponana germari</i>	Leafhopper	Cut foliage	Quar	8
<i>Homalodisca vitripennis (adults)</i>	Glassy-winged sharpshooter	Nursery plants	Nurs	7,947
<i>Homalodisca vitripennis (eggs)</i>	Glassy-winged sharpshooter	Nursery plants	Nurs	8
<i>Hypoconera sp.</i>	Ant	Ginger/Sweet potato	Quar	5
<i>Kallitaxila granulata</i>	Planthopper	Cut foliage	Quar	17
<i>Lepidosaphes beckii</i>	Purple scale	Grapefruit	Quar	7
<i>Lepidosaphes eurychlidonis</i>	Armored scale	Persimmon	Quar	1
<i>Maconellicoccus hirsutus</i>	Pink hibiscus mealy bug	Cherimoya	Quar	1
<i>Meghimatium bilineatum</i>	Slug	Palm	Quar	2
<i>Mycetaspis personata</i>	Masked scale	Mango	Quar	1
<i>Nipaecoccus sp.</i>	Coconut mealybug	Palm	Quar/Nurs	15
<i>Nysius sp.</i>	Lygaeid bug	Cut foliage	Quar	1
<i>Ochetellus glaber</i>	Ant	Silver tree/Cut foliage	Quar	3
<i>Palmicultor lumpurensis</i>	Bamboo mealybug	Bamboo	Nurs	3

PEST EXCLUSION ACTIVITIES – ENTOMOLOGY LABORATORY

PEST INTERCEPTED Latin Name	PEST INTERCEPTED Common Name	MATERIAL	SOURCE*	# of INTERCEPTIONS
<i>Palmicultor palmarum</i>	Palm mealybug	Palm	Quar	1
<i>Paracoccus gilliana</i>	Mealybug	Agave	Nurs	3
<i>Paracoccus sp.</i>	Mealybug	Cut flowers	Quar	1
<i>Parlatoria pergandii</i>	Armored scale	Citrus	Quar	5
<i>Parmarion martinsi</i>	Semi slug	Dracaena	Quar	1
<i>Paropeas achatinaceum</i>	Snail	Cut foliage	Quar	1
<i>Pheidole megacephala</i>	Big headed ant	Cut foliage	Quar	5
<i>Phenacoccus peruvianus</i>	Mealybug	Nursery plants	Nurs	7
<i>Pinnaaspis buxi</i>	Boxwood scale	Cut foliage	Quar	8
<i>Pinnaaspis strachani</i>	Lesser snow sale	Cut foliage/Nursery plants	Quar/Nurs	9
<i>Pinnaaspis uniloba</i>	Armored scale	Cut foliage	Quar	1
<i>Planococcus sp.</i>	Mealybug	Cut foliage	Quar	2
<i>Poliaspis media</i>	Cycad poliaspis scale	Cycads	Nurs	2
<i>Poliaspoides formosana</i>	Armored scale	Bamboo	Quar	1
<i>Protopulvinaria pyriformis</i>	Pyriform scale	Nursery plants	Nurs	8
<i>Pseudaonidia duplex</i>	Camphor scale	Persimmon	Quar	1
<i>Pseudaulacaspis cockerelli</i>	Magnolia white scale	Cut foliage/Nursery plants	Quar/Nurs	10
<i>Pseudaulacaspis pentagona</i>	White peach scale	Persimmon	Quar	1
<i>Pseudococcus jackbeardsleyi</i>	Mealybug	Herbs/Taro	Quar	5
<i>Pseudococcus odermatti</i>	Mealybug	Tejocote/Longan	Quar	4
<i>Pseudococcus sp.</i>	Mealybug	Cut foliage	Quar	3
<i>Pulvinaria psidii</i>	Green shield scale	Nursery plants	Nurs	13
<i>Pycnoscelus sp.</i>	Cockroach	Sweet potato	Quar	1
<i>Rhagoletis pomonella</i>	Apple maggot	Asian pear/Tejocote	Quar	2
<i>Sardia rostrata</i>	Planthopper	Basil	Quar	1
<i>Scirtothrips dorsalis</i>	Chilli thrips	Rose	Nurs/Pub	10
<i>Singhiella simplex</i>	Ficus whitefly	Ficus	Nurs	2
<i>Solenopsis invicta</i>	Red imported fire ant	Nursery plants	Nurs/Pub	7
<i>Solenopsis sp.</i>	Fire ant	Basil	Quar	1
<i>Spodoptera sp.</i>	Noctuid moth	Basil/Cut foliage	Quar	2
<i>Tarophagus colocasiae</i>	Taro planthopper	Taro/Sweet potato	Quar	34
<i>Technomyrmex sp.</i>	White footed ant	Ginger/Cut foliage	Quar	3
<i>Terastia meticulosalis</i>	Erythrina twigborer	Erythrina	Pub	2
<i>Tetranychus sp.</i>	Tetranychid mite	Cut foliage	Quar	2
<i>Thysanoflorinia nephelii</i>	Longan scale	Longan/Lychee	Nurs/Quar	2
<i>Toumeyella liriiodendri</i>	Tuliptree scale	Magnolia	Pub	1
<i>Unaspis citri</i>	Citrus snow scale	Citrus	Quar	1
<i>Veronicella cubensis</i>	Slug	Taro	Quar	2
<i>Wasmannia auropunctata</i>	Little fire ant	Ginger	Quar	1
<i>Xyloborus sp.</i>	Scolytid beetle	Cut flowers	Quar	1
<i>Zachrysia provisoria</i>	Snail	Logan	Quar	2
<i>Zaprionus indianus</i>	African fig fly	Edible fig	Pub	2
Slugs in families Philomycidae & Veronicellidae				3
Various immature stages of insects (orders Coleoptera, Lepidoptera, Hemiptera, Orthoptera, Diptera, Hymenoptera and Thysanoptera)				235
Source*: Nurs: Nursery Quar: Quarantine Pub: Public			TOTAL	8,552

PLANT PATHOLOGY LABORATORY

Plants	Material	Source*	# of Interceptions
<i>Centaurea salmantica</i> / Q rated Dagger flower	Weed	Quar	1
<i>Eichhornia crassipes</i> / Q rated Water Hyacinth	Weed	Quar	1
<i>Phragmites australis</i> / Q rated Common Reed	Weed	Quar	1
<i>Salvinia cf. molesta</i> / A rated Kariba-Weed	Weed	Invasive Weed	1
Fungi			
<i>Colletotrichum asianum</i> /Anthracnose	Mango	Quar	11
<i>Colletotrichum dianesei</i> /Anthracnose	Mango	Quar	1
<i>Colletotrichum queenslandicum</i> /Anthracnose	Avocado	Quar	1
<i>Colletotrichum truncatum</i> / Anthracnose	Fig Leaf	Quar	1
<i>Dasturella divina</i> / Bamboo Rust	Bamboo	Quar	2
<i>Greeneria uvicola</i> / Bitter Rot	Grape Leaves	Quar	1
<i>Gymnosporangium juniperi-virginianae</i> / Cedar Apple Rust	Crab Apple	Quar	7
<i>Neofusicoccum mangiferae</i> / Fruit Rot	Mango	Quar	7
<i>Pseudocercospora jujubae</i> / Leaf Spot	Jujube Leaf	Nurs	1
<i>Pseudofusicoccum sp.</i> / Fruit Rot	Avocado	Quar	1
<i>Puccinia psidii</i> / Guava Rust	Myrtle	Nurs	1
Bacteria			
<i>Candidatus Liberibacter</i> / Citrus Greening	Orange	Quar	3
Source*: Nurs: Nursery Pub: Public Quar: Quarantine		TOTAL	41

PEST DETECTION ACTIVITIES

Pest	Number of Traps Pest Detection	Specimens Trapped
All Purpose Fruit Fly (McPhail Traps)	4,700	See Pest Column
Mediterranean Fruit Fly (Jackson Traps)	4,600	0
Melon Fruit Fly (Jackson Traps)	4,700	1
Oriental Fruit Fly (Jackson Traps)	4,700	51
Gypsy Moth	2,500	2
Japanese Beetle	2,700	0
Japanese Beetle – Golf Courses & Cemeteries	535	0
Mexican Fruit Fly		4
True Guava Fruit Fly		12
TOTAL	24,435	70

PEST ERADICATION ACTIVITIES

Pest	Method	Scope of Program
Oriental Fruit Fly	2 Quarantines/Male Attractant Technique	10 treatment areas
Mediterranean Fruit Fly	Continued preventative program: sterile Medfly release countywide	0 treatment area
Guava Fruit Fly	1 Quarantine/Male Attractant Technique	1 treatment area
Mexican Fruit Fly	1 Quarantine/Male Attractant Technique	1 treatment area

BIOLOGICAL CONTROL ACTIVITIES

Pest	Method	Scope of Program
Mediterranean Fruit Fly	Sterile Release	8 billion released
Mexican Fruit Fly	Sterile Release	290 million released



DETECT TO PROTECT YOUR CROP

Integrated Pest Management (IPM) had its start right here in Los Angeles County in 1888 with a very successful project that “established the biological control method like a shot heard around the world” (DeBach 1974). A natural predator that destroyed cottony-cushion scale from citrus trees was found, establishing “biological control” as a viable IPM method, along with pest detection and chemical control which were already in use. Later, in 1924, the first Insectary in the county was established to combat the *Citrophilus* mealybug. During its 32 years in operation, a total of 78 million ladybird beetles were produced, increasing production and reducing the use of pesticides. Detection traps, another step in IPM, are still placed in fruit trees today to detect exotic pests.

*Pest detection (Left)
and the use of beneficial insects (Right)
have helped us protect citrus.*



“OUR CITRUS LEGACY”

Citrus is an integral part of Los Angeles County’s agricultural history. The names of citrus growing families can still be observed throughout the area, including the Rowlands, Workmans, and Daltons. The Mission San Gabriel had orange and lemon trees, but they suffered from neglect when the Mission was secularized in 1834. On Aliso Street in Los Angeles, Jean Vignes transplanted trees from the Mission to create the area’s first private grove. In 1841, William Wolfskill planted the area’s first commercial citrus grove along Central Avenue and Fifth Street with orange seeds from the Mission. In 1842, John Rowland bought Rancho La Puente from the Mexican government and then shared it with William Workman. In 1843, Henry Dalton bought part of Rancho San Jose, the San Jose Addition, and Rancho El Susa. Dalton planted citrus, having bought (or brought) trees from the Mission and irrigating the orchard with water from the San Gabriel River. By 1857, Wolfskill had the largest orange orchard in the USA.

By 1880, citrus orchards and vineyards were the financial leaders of South California agriculture; there were 200,000 citrus trees of bearing age in the county, with over 100,000 more maturing. The first state plant quarantine was legislated into existence in 1881, and our office was founded as the Horticultural Commissioner.

Rapid growth of the industry was challenged, however. Cottony-cushion scale, *Icerya purchasi*, which had arrived in the 1860s from Australia, was spreading southward from the Bay Area. Competing railroad lines brought numerous settlers and speculators, and land prices increased to what were irresistible levels for some orchard owners. While railroads brought settlers, they also provided our citrus growers access to midwestern and eastern markets. Completion of the Southern Pacific Valley Railroad Line in 1876 connected Southern California with the Transcontinental Railroad in central California. The midwestern and eastern states opened up to our citrus growers thanks to the 1887 arrival of the Atchison, Topeka, and Santa Fe Railroad, which provided a direct route eastbound, and subsequent improvements in railroad cars for cooling and shipping citrus. However, in 1893, to better protect their interests and profits from the railroad companies, growers formed the Southern California Fruit Growers Exchange, a cooperative known today as Sunkist Growers.

Our records indicate that, in 1912, we had a count of 4,203,077 fruit-bearing trees, 4,846,400 nursery stock, and 5,815,000 seed bed stock. A severe freeze in 1913 damaged citrus fruit and trees, but the same year also marked the completion of the California aqueduct system, which provided a more reliable water supply to a growing industry.

Packing houses were modernized, allowing electric power to move citrus fruit along conveyer belts for washing and processing. By the 1920s, citrus helped make fruit growing the biggest industry in the San Fernando Valley. During the 1920s and 1930s, California citrus revenue ranked second to the oil industry. However, the looming demise of the Los Angeles County citrus industry began as the area blessed with the climate for citrus became an increasingly desirable place for people to live. For the next 30 years, the citrus industry fought weather, pestilence, encroaching oil industry and a huge influx in population. Ultimately, citrus groves became housing tracts and the industry eventually migrated north to the San Joaquin Valley.