

# ***The Evolving Fresh Market Berry Industry Santa Cruz and Monterey Counties\****

**Laura Tourte  
Farm Management Advisor  
UC Cooperative Extension  
Santa Cruz County**

**Also:  
Mark Bolda  
Karen Klonsky  
UC Cooperative Extension**

***\*From:  
California Agriculture  
(forthcoming)***



***February 4, 2016  
Annual Strawberry Meeting***

# Central Coast Cost and Return Studies

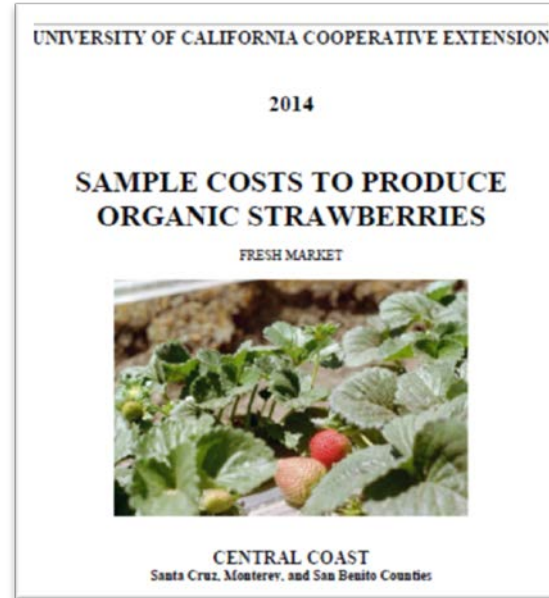
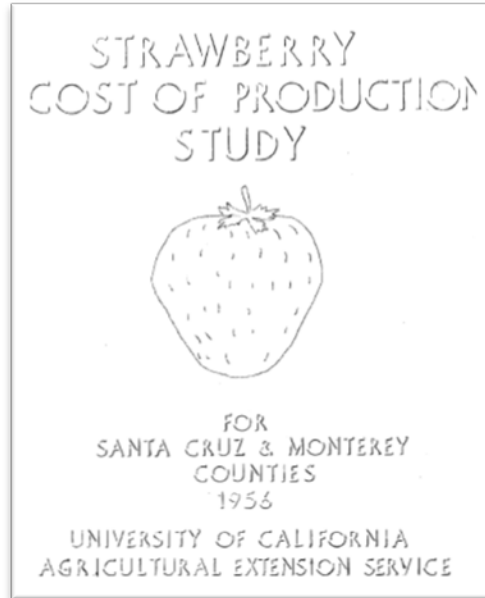


Strawberries  
1950s to 2014

Raspberries  
2003 to 2012

Blackberries  
2008 to 2013

# *Studies have provided, over time...*

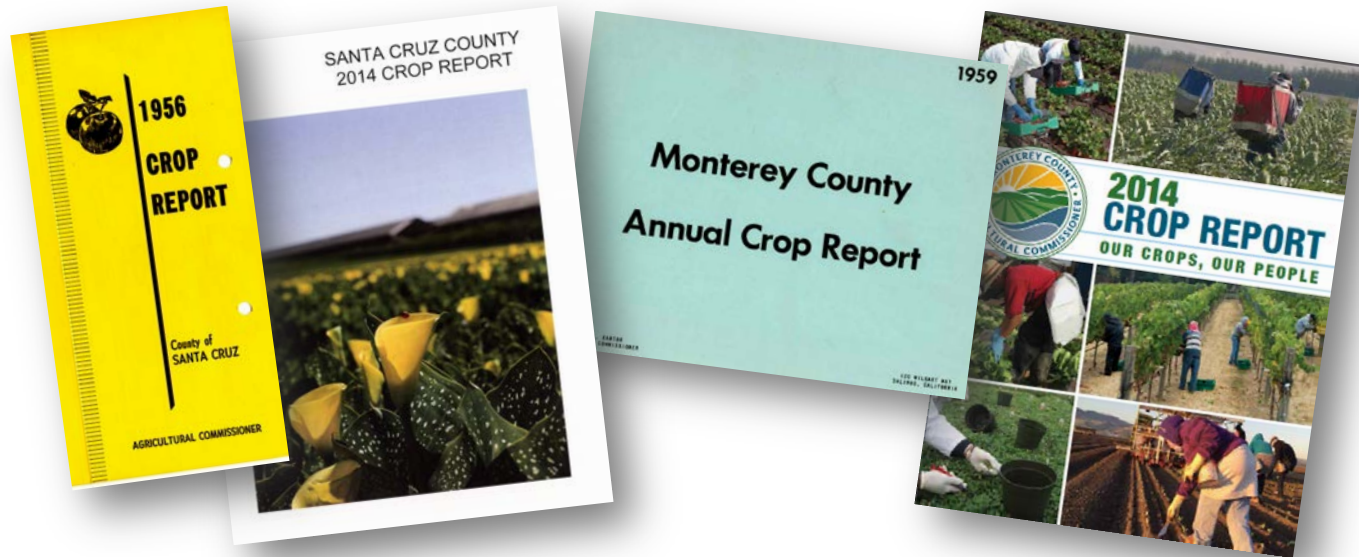


- Various levels of production detail
- Sample production costs and prices to growers
- Insights into changing nature of industry

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# *County crop reports have also provided, over time*



- Various levels of detail
- Acreage, production, and value of production
- Insights into changing nature of industry

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# ***A question arose...***

Could we use these sources of data as the basis for looking at the evolution of the berry industry from the 1950s to the present?

***A few results...***



# *Strawberries reign supreme... but*

Increasing importance of all berries, especially in Santa Cruz County

Year	Santa Cruz County Value of Production (\$ Million)				Monterey County Value of Production (\$ Million)			
	All Products	All Berries <sup>†</sup>	Strawberries <sup>‡</sup>	Raspberries <sup>§</sup>	All Products	All Berries <sup>†</sup>	Strawberries <sup>‡</sup>	Raspberries <sup>§</sup>
1960	33.6	5.4 (16)	4.1 (76)	0.2 (4)	132.8	17.1 (13)	16.9 (99)	na <sup>¶</sup>
1980	100.0	23.5 (24)	21.2 (90)	1.6 (7)	745.5	45.3 (06)	45.3 (100)	na
2000	352.0	180.8 (51)	126.5 (70)	44.4 (25)	2,923.3	231.2 (08)	228.0 (99)	2.1 (1)
2014	616.5	395.8 (64)	228.1 (58)	131.3 (33)	4,493.4	754.3 (17)	709.3 (94)	45.0 (6)

Source: Santa Cruz and Monterey County Agricultural Commissioners' Crop Reports.

† Number in parentheses is the percent berries of total value of all products.

‡ Number in parentheses is the percent strawberries of total value of all berries.

§ Number in parentheses is the percent raspberries of total value of all berries.

# *A closer look at strawberries...*

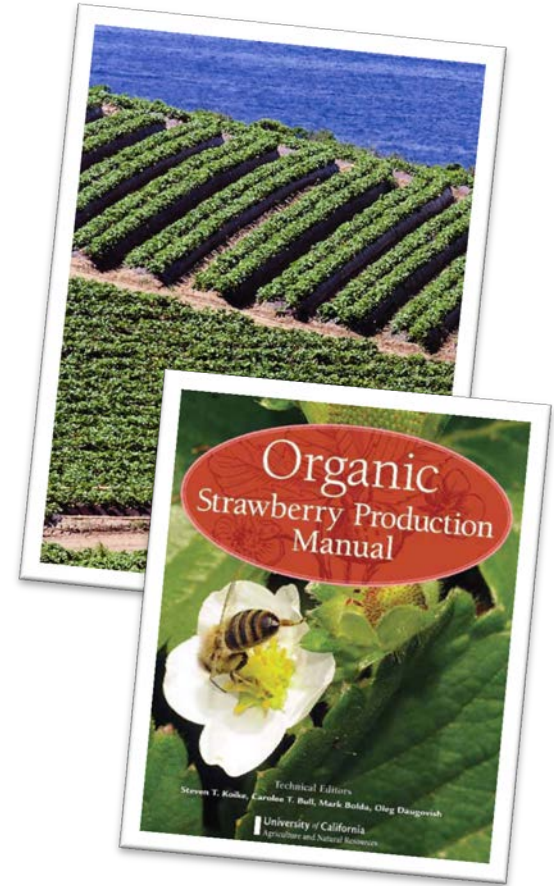
	Santa Cruz County Strawberry Production and Value (\$)					Monterey County Strawberry Production and Value (\$)				
Year	Acreage	Tons Produced	Tons Per Acre	Value of Production	Value Per Acre <sup>†</sup>	Acreage	Tons Produced	Tons Per Acre	Value of Production	Value Per Acre <sup>†</sup>
1960	1,070	10,060	9	4,118,000	3,849	3,510	40,742	12	16,934,000	4,825
1980	1,355	32,800	24	21,154,000	15,612	2,785	59,185	21	45,279,000	16,258
2000	4,580	138,728	30	126,520,000	27,624	6,990	225,966	32	227,984,000	32,616
2014	3,298	100,061	30	228,140,000	69,175	11,054	413,000	37	709,296,000	64,166

Source: Santa Cruz and Monterey County Agricultural Commissioners' Crop Reports

† Before production costs and taxes.

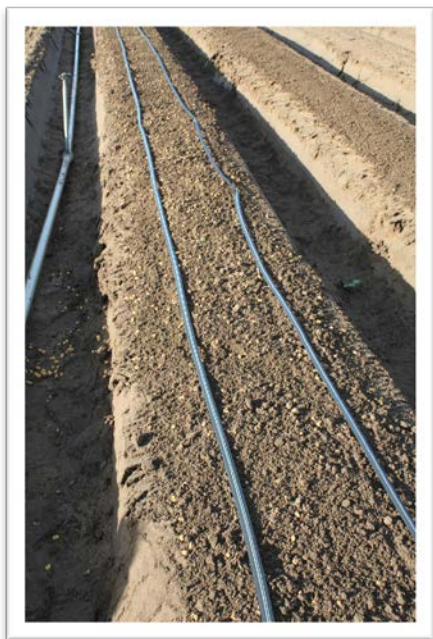
# *Berry industry expansion: many factors*

- Introduction of soil fumigants
- Development of public and proprietary varieties
- Cultural practice improvements and efficiencies
- Health attributes of berries; consumer education and demand
- Organic production





## *Fresh market strawberries: cultural practice example*



Water use:                    1969 = 80 ac in/acre  
(furrow to drip)            2010 = 36 ac in/acre +

Rep. yield:                    1969 = 20 tons/acre  
(conventional)            2010 = 30 tons/acre

Improvements: disease management, yield  
Water use efficiency: ac in/acre, tons/acre

Source: UC Cooperative Extension Cost and Return Studies. <http://coststudies.ucdavis.edu>

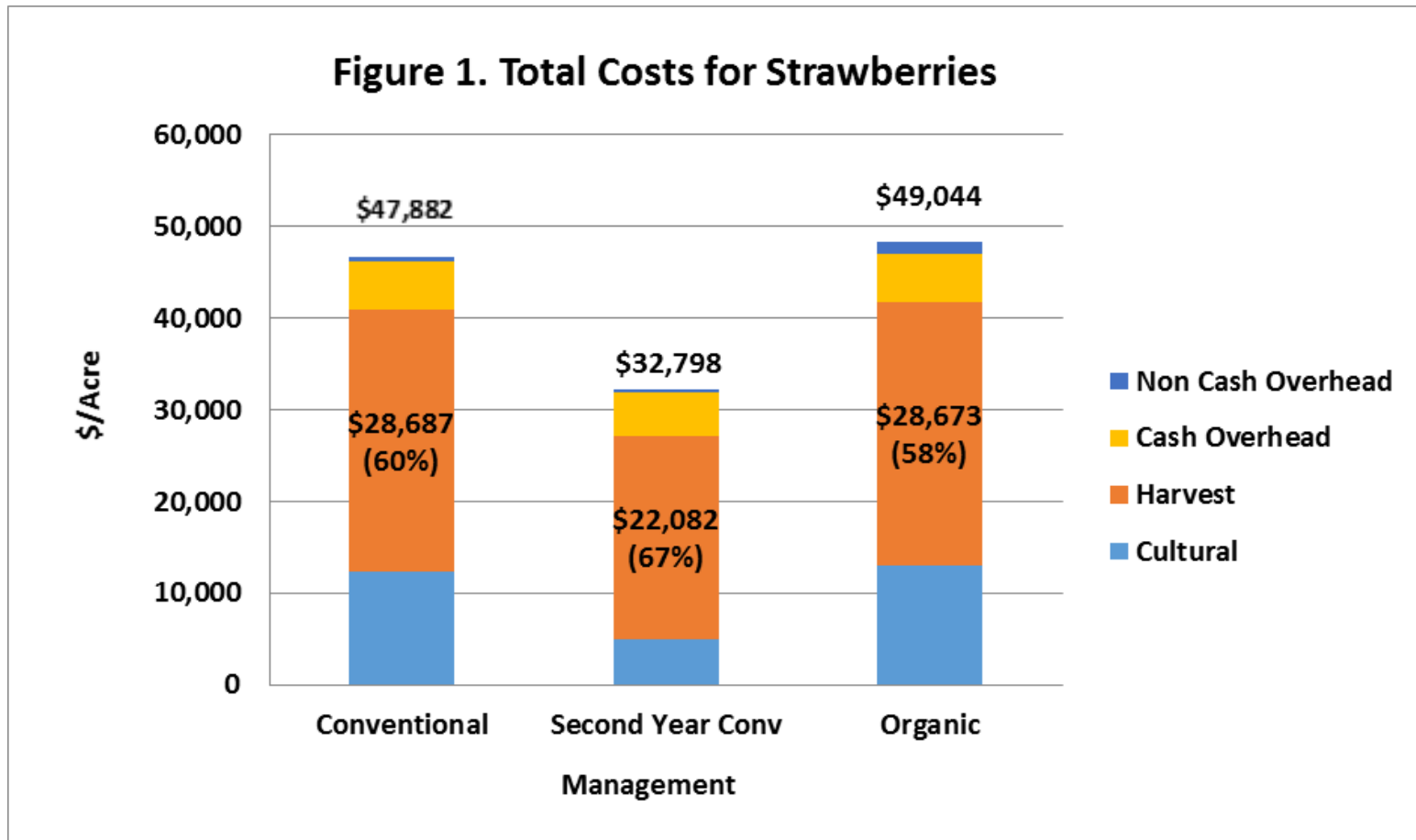
# Organic Berry Production in California

	2000	2005	2010	2012	Change (Percent) <sup>†</sup>
<b>Acreage</b>					
<b>Strawberries</b>	<b>509</b>	<b>1,406</b>	<b>2,009</b>	<b>2,681</b>	<b>427</b>
<b>Raspberries</b>	<b>157</b>	<b>332</b>	<b>919</b>	<b>1,007</b>	<b>541</b>
<b>Blackberries</b>	<b>45</b>	<b>114</b>	<b>363</b>	<b>312</b>	<b>593</b>
<b>Total</b>	<b>711</b>	<b>1,852</b>	<b>3,291</b>	<b>4,000</b>	<b>463</b>
<b>Value (\$1,000)</b>					
<b>Strawberries</b>	<b>9,741</b>	<b>25,141</b>	<b>65,521</b>	<b>93,595</b>	<b>861</b>
<b>Raspberries</b>	<b>1,142</b>	<b>9,718</b>	<b>24,453</b>	<b>50,659</b>	<b>4,337</b>
<b>Blackberries</b>	<b>284</b>	<b>1,420</b>	<b>8,312</b>	<b>11,391</b>	<b>3,904</b>
<b>Total</b>	<b>11,167</b>	<b>36,279</b>	<b>98,286</b>	<b>155,645</b>	<b>1,294</b>

Source: Statistical Review of California's Organic Agriculture 2005-2009 and 2009-2012.

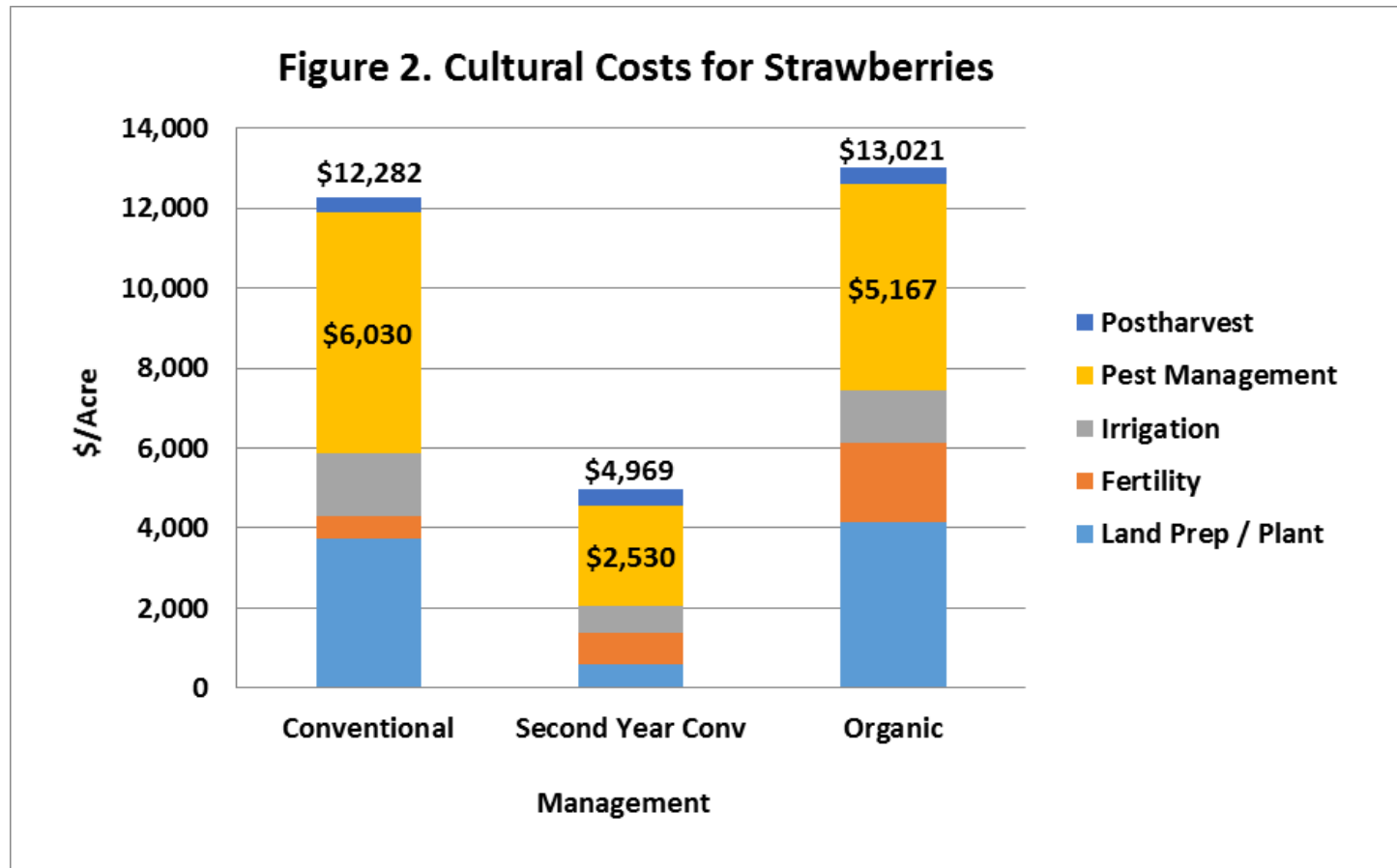
<sup>†</sup> Percent change from 2000 to 2012.

# Recent Studies: Fresh Market Strawberries - 1



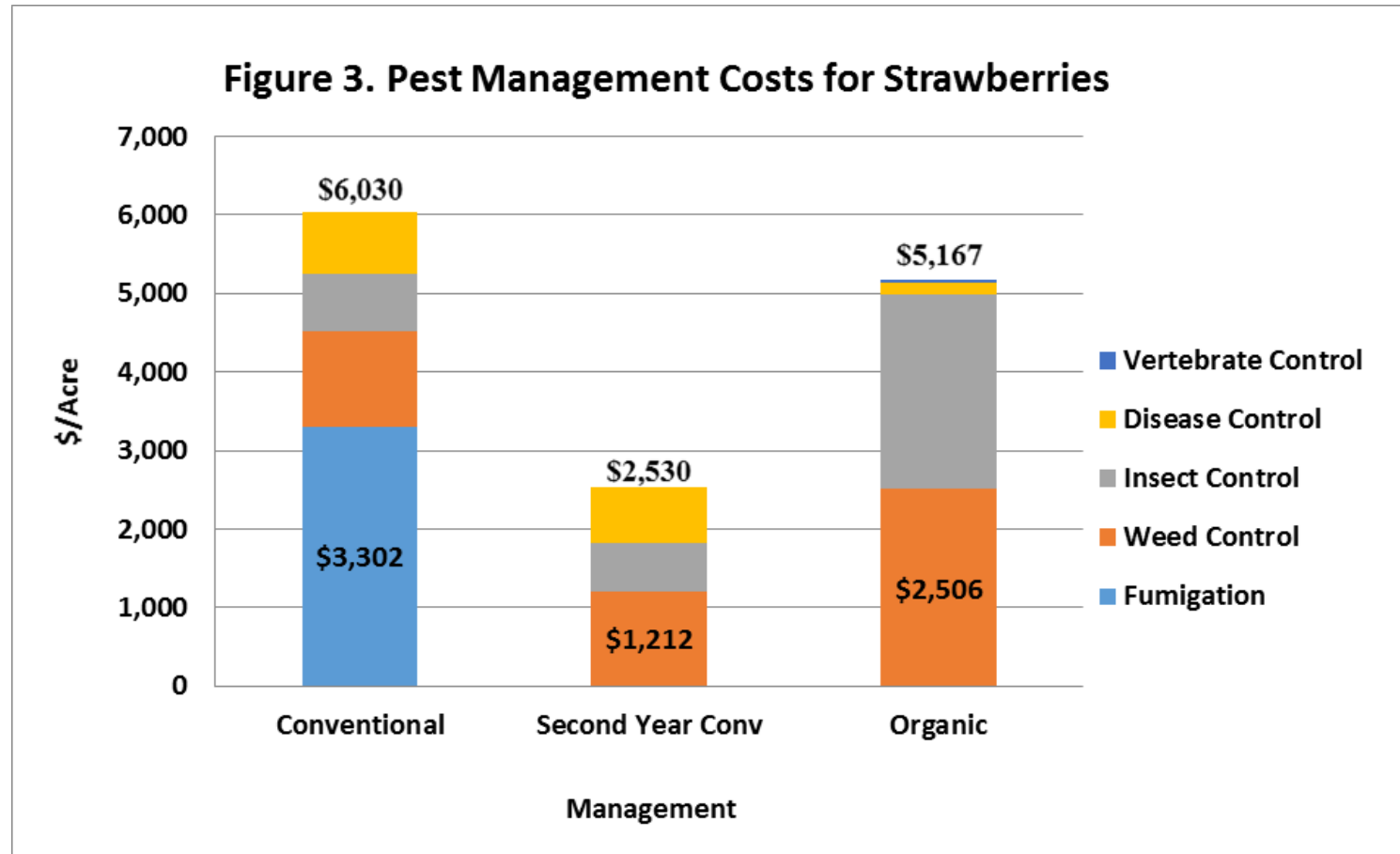
Source: UC Cooperative Extension Cost and Return Studies. <http://coststudies.ucdavis.edu>

## Recent Studies: Fresh Market Strawberries - 2



Source: UC Cooperative Extension Cost and Return Studies. <http://coststudies.ucdavis.edu>

## Recent Studies: Fresh Market Strawberries - 3



Source: UC Cooperative Extension Cost and Return Studies. <http://coststudies.ucdavis.edu>

# Net Returns Above Total Costs (\$ per Acre) for Strawberries - Santa Cruz and Monterey Counties<sup>†</sup>

Yield <sup>‡</sup>	Conventional			Second Year Conventional			Organic		
	Low	Rep	High	Low	Rep	High	Low	Rep	High
Price <sup>‡</sup>									
Low	-8,819	-4,067	684	-4,992	-3,498	-2,004	-1,479	1,956	5,392
Rep	-819	7,933	16,684	608	3,502	6,396	9,771	14,706	19,642
High	7,181	19,933	32,684	6,208	10,502	14,796	21,021	27,456	33,892

Source: UC Cooperative Extension Cost and Return Studies. <http://coststudies.ucdavis.edu>

<sup>†</sup> Data are selected from the Ranging Analysis Table in each study; each study has more detail.

<sup>‡</sup> Denotes low, representative, and high yield per acre and price per tray.

# *UC Cooperative Extension Resources...*

## **UCCE - UC Davis Cost and Return Studies**

<http://coststudies.ucdavis.edu>

- English only
- Current and archived studies estimating costs and returns for wide variety of crops, conventional and organic

## **Berry Blog (Mark Bolda)**

[http://cesantacruz.ucanr.edu/UC\\_Blogs/](http://cesantacruz.ucanr.edu/UC_Blogs/)

- English and Spanish
- Information on all aspects of berry production and management

## **Farm Business & Market Place Website (Laura Tourte)**

<http://ucanr.edu/sites/farmbus/>

- English with some Spanish
- Information for small to mid-scale farmers on planning, management and marketing

## **Additional UCCE Blogs**

[http://cesantacruz.ucanr.edu/UC\\_Blogs/](http://cesantacruz.ucanr.edu/UC_Blogs/)



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