

# 2015 Iowa Commercial Horticulture Survey

Appendices A, B, and C



IOWA STATE UNIVERSITY  
Extension and Outreach



# Appendix A: Limitations of the Survey

**We chose to conduct a census, rather than a weighted sample, so results from the 2015 Iowa Commercial Horticulture Survey for Food Crops should not be compared with previous surveys to decipher trends.**

We selected the census model because we expected too much variation among horticulture producers to be able to select a representative sample. However, this report does at times make comparisons when statistically possible (e.g., comparing percentages). We did this with the understanding that differences may and likely do exist between those who answered previous surveys and those who answered the 2015 survey, given the high turnover in horticulture producers as well as the high variability among those producers (such as production acreage, types of crops grown, quantity grown, etc.).

Several survey questions involving tables received a poor response rate, which is summarized in *Table i*. Three types of tables were included in the survey: production, marketing, and processing. The first set, the production tables, includes questions 10, 11, and 12 (*Appendix C*). These are questions on production of vegetables, fruits, nuts, maple syrup, honey, and berries. More than half of respondents (56 percent) did not fill out the production tables. Some respondents may have grown only one class of crops (such as only fruit or only maple syrup) and, therefore, correctly skipped production tables that did not apply to them. However, we would expect that all respondents would be able to fill out something in at least one of the tables, since the criterion for inclusion and completion was their production of at least one horticultural crop in 2015. Because 44 percent did not fill out a production table, we cannot estimate the total production of any one crop using our data.

The second set, the marketing tables (which included questions 14 and 15 in *Appendix C*), asked what percent of total production respondents sold through each type of market and the dollar value of each crop sold through each channel. This set of tables also had a poor response rate (41 percent compared to 56 percent for the production tables). Like the production tables, we expected that these tables would apply to all growers, but 59 percent did not complete them.

Finally, the on-farm processing table (question 13 in *Appendix C*) asked respondents to share the gross sales of processed, value-added food products that they processed themselves or someone else custom-processed for them, and the percent of those products made with horticultural products purchased from out of

state. We did not expect this table to apply to all respondents, as many do not process their horticultural products into value-added products. Seven percent of respondents filled out this table. We expected this figure to be lower than the actual number of respondents who are processing products and should have completed the table, given the poor response rates to both the production and marketing tables.

We can only speculate as to why respondents did not fill out these tables. It may have to do with the lack of time or interest in providing the information, given the sheer volume of data we were requesting and the time it would take to compile it. Another explanation for the missing data is that farmers simply do not have record-keeping systems in place to answer the questions. A few respondents wrote, “I don’t know” across one or more of the tables, indicating that at least some respondents did not keep records from which the requested information could be gathered.

We also know that horticulture producers with higher acreage completed the production tables at a slightly higher rate than those with lower total acreage. More than half (55 percent) of those with more than 10 acres in horticultural production filled out at least one table, compared to 39 percent of those with 1 acre or less. This difference was statistically significant at the alpha = .05 level. Again, the reason for this is unknown. However, the difference in response rates between growers of higher and lower acreage may affect interpretation of the data, as the production data slightly over-represent larger growers.

*Table i: Response rates by questionnaire table*

	Respondents (n=882)	Response rate
<b>Production tables:</b>		
Vegetable production table	224	25%
Fruits and nuts production table	159	18%
Maple syrup production table*	12	1%
Honey production table*	64	7%
Berry production table	133	15%
<b>Any production table</b>	<b>388</b>	<b>44%</b>
<b>Marketing tables:</b>		
Marketing table by percent of production	357	40%
Marketing table by dollar value of sales	195	22%
<b>Any marketing table</b>	<b>358</b>	<b>41%</b>
On-farm processing table	63	7%

\*a subsection of the fruit and nut production table

# Appendix B: Tables and Figures

## Methods

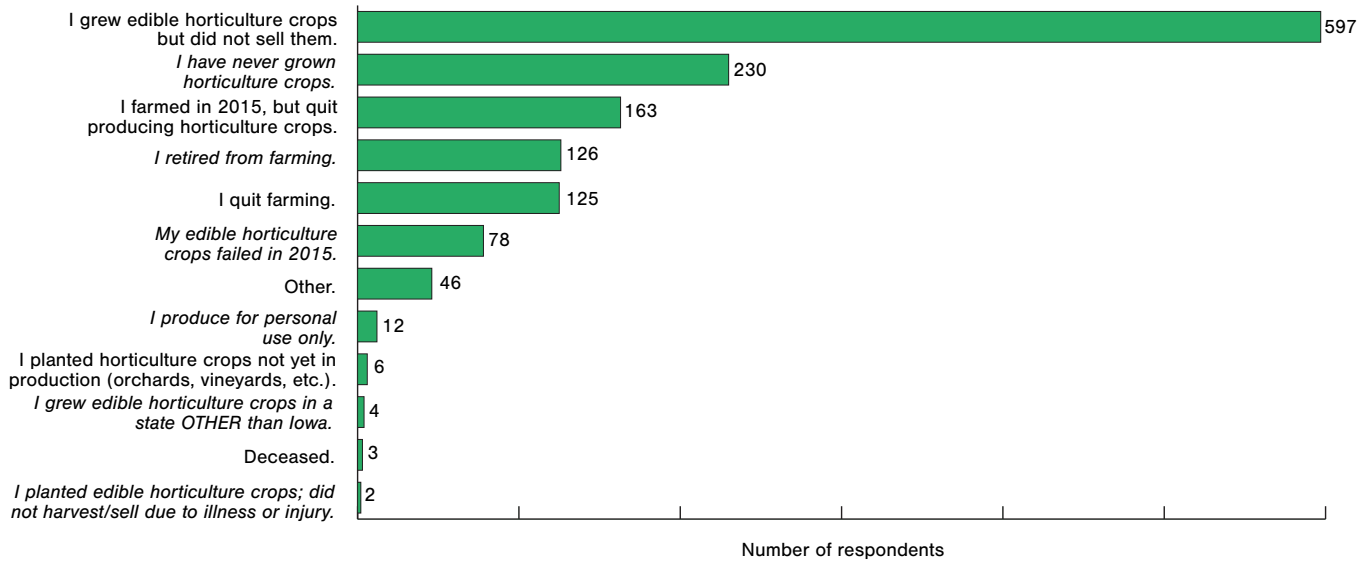


Figure i: Reasons for not taking the survey (n=1072)

## Farm Size

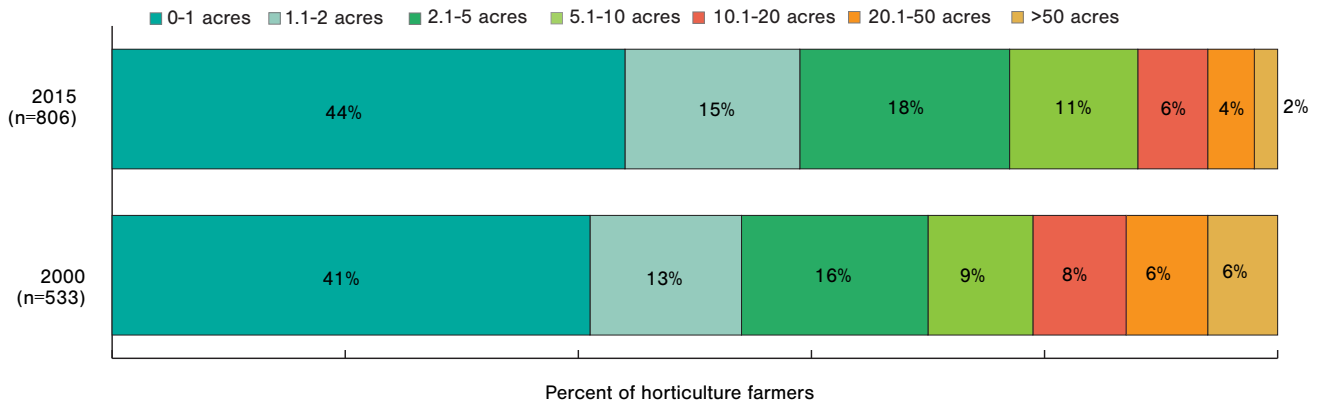


Figure ii: Total acreage in horticultural production

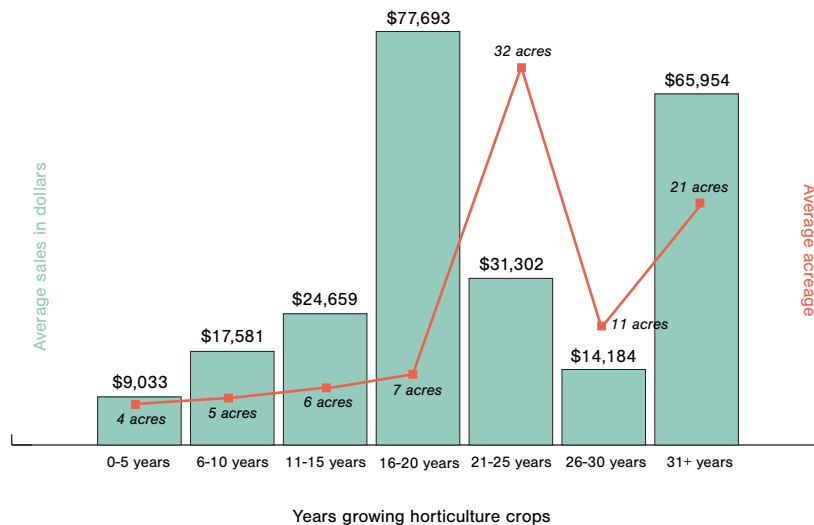


Figure iii: Average sales and acreage by years growing horticultural crops

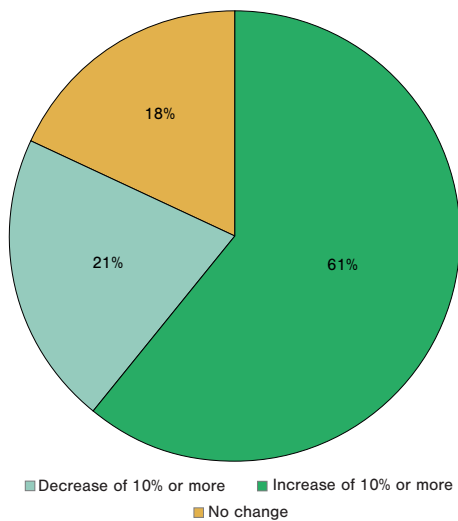


Figure iv: Change in sales from 2010 to 2015 (n=396)

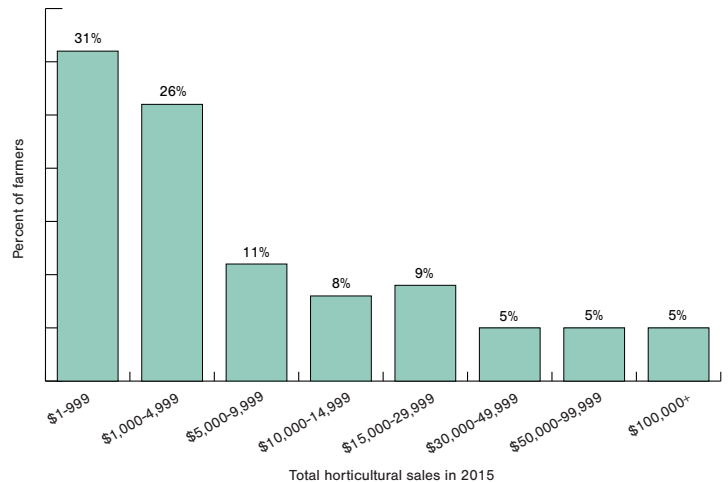


Figure v: 2015 horticultural sales (n=751)

Table ii: Horticultural sales in 2000

Year	Total sales	Average sales
2000 (n=572)	\$19,705,700	\$34,450
2000, adjusted for inflation to 2015 values*	\$27,123,031	\$47,417

\* "CPI Inflation Calculator," 2016

Table iii: Summary of fruit, nut, and berry production

	Percent of fruit producer respondents growing crop		Average acreage*		
	2015	2000	2015	2000	1989
<b>Apples</b>	41%	43%	4.52	7.96	
<b>Aronia berries</b>	13%		3.60		
<b>Grapes, all</b>	32%	8%	3.00	0.50	
Grapes (table)	8%	7%	0.54**	0.63**	
Grapes (wine)	26%	7%	3.75	2.07**	
<b>Hops</b>	3%		1.67**		
<b>Melons, all</b>	19%	46%	1.95**	4.77	6.13
Cantaloupes/Muskmelons	14%	26%	1.59		
Watermelons	13%	24%	1.07**		
<b>Nuts, all^</b>	8%	4%	2.60	1.20	
<b>Raspberries</b>	14%	20%	0.40**	0.28	
<b>Strawberries, all</b>	13%	24%	0.45	2.04	2.44
Strawberries (day neutral/ever-bearers)	4%		0.17		
Strawberries (June bearers)	11%		0.51		
<b>All other tree fruit^^</b>	13%	18%	1.55	2.26	
<b>All other berries^^^</b>	8%	8%	0.39	0.48	

\*All acreage values are imputed estimates, unless marked with \*\*, in which case imputed estimates were not shared due to poor precision.

\*\*Average acreage only from respondents sharing complete data, i.e. not imputed estimates.

^Includes chestnuts, hazelnuts, walnuts, butternuts, and pecans.

^^Includes pears, peaches, tart cherries, apricots, and plums.

^^^Includes blueberries, blackberries, currants, elderberries, gooseberries, mulberries, and others.

Table iv: Summary of vegetable production

Crop***	Percent of vegetable producer respondents growing crop		Average acreage*		
	2015, n=224	2000, n=486	2015	2000	1989
Asparagus	28%	18%	0.62	0.92	3.12
Beets	10%	25%	0.06	0.06	0.20
Broccoli	26%	14%	0.16	0.06	0.32
Cabbage	32%	27%	1.19	0.14	3.12
Carrots	18%	18%	0.76	4.49	4.82
Cucumber	42%	34%	0.31	0.17	1.39
Eggplant	21%	15%	0.22	0.12	0.26
Garlic	17%	9%	0.13	0.05	
Gourds	16%		0.52		
Green beans	38%	42%	2.49	0.22	6.67
Herbs	17%	9%	0.05**	0.16**	
Kale	6%		0.29		
Kohlrabi	8%	14%	0.07	0.07	
Lettuce	20%	21%	0.06**	0.06	0.23
Onions (dry)	36%	26%	0.26	0.71	2.34
Peas	23%	22%	4.53	5.36	10.72
Peppers (hot)	29%	17%	0.09	0.14	
Peppers (sweet)	37%	31%	0.37	0.26	1.35
Potatoes	29%	31%	0.46	4.24	11.56
Pumpkins, all	44%	30%	4.74	5.71	2.36
Pumpkin (other)	38%		3.27		
Pumpkin (pie)	24%		3.81		
Radish	5%	32%	0.10**	0.07	0.13
Rhubarb^	6%	5%	0.32**	0.08	
Spinach	13%	9%	0.06**	0.04	0.16
Squash (summer)	29%	26%	0.63	0.16	1.12
Squash (winter)	38%	24%	1.16	0.96	1.82
Sweet corn	38%	53%	14.87	9.24	
Sweet potato	12%	4%	0.42	0.10	0.10
Tomato	52%	49%	0.28**	0.30	
Other vegetables^^	17%	21%	0.21	0.07	

\*All acreage values are imputed estimates, unless marked with \*\*, in which case imputed estimates were not shared due to poor precision.

\*\*Average acreages are calculated only from respondents sharing complete data, i.e. not imputed estimates.

\*\*\*Dry beans, daikon, and turnips are not included in this table nor are they included in "other vegetables", because they had a low response number and high total acres, significantly skewing the data.

^Rhubarb was in the fruit category in 2000, hence the percentage of growers in 2000 is calculated using n=284.

^^ Other vegetables include Brussels sprouts, cauliflower, collard greens, horseradish, leeks, mushrooms, mustard greens, okra, green onions, rutabaga, turnip greens, microgreens, and/or other vegetables.

### Honey Production

Sixty-four honey producers completed the honey production table. Another 97 filled out one of the marketing tables, for a total of 161 producers. Combining data from both tables, we were able to generate imputed estimates of the total number of colonies, pounds of honey produced, and dollars realized from the sale of honey for our respondents only, shown in *Table v*. Respondents reported having just over 9,000 colonies, which produced a total of 564,920 pounds of honey in 2015, with sales of more than \$1.5 million. For comparison, the USDA National Agricultural Statistics Service estimated there were 36,000 colonies in Iowa in 2016, producing 1.8 million pounds, valued at \$4.2 million.

Our respondents cited a higher average yield (62 pounds/colony) than the USDA survey (50 pounds per colony); they also reported receiving a higher average price (\$2.77 vs. \$2.33). However, the USDA estimates only include producers with five colonies or more, whereas our estimates included all producers. Of the 64 respondents who completed the honey production table, 17 (27 percent) had four colonies or fewer, so they would not have been included in the USDA report. The fact that our respondents included these small producers may explain part of the reason average yields and prices were higher.

*Table v: Honey production and dollars realized, imputed estimates and USDA NASS statistics*

	Imputed estimate, 2015	USDA NASS, 2015 estimates *
<b>Number of producers</b>	161	n/a
<b>Total colonies</b>	9,057	36,000
<b>Average number of colonies per producer</b>	56	n/a
<b>Median number of colonies</b>	8	n/a
<b>Total pounds produced</b>	564,920	1,800,000
<b>Average yield (pounds/colony)</b>	62	50
<b>Dollars realized</b>	\$1,566,067	4,194,000
<b>Average price per pound</b>	\$2.77	\$2.33

\*2016 Annual Statistical Bulletin. (USDA National Agricultural Statistics Service, 2016).

### Maple Syrup Production

Thirteen maple syrup producers responded to our survey, tapping an estimated 3,290 trees and producing a total of 638 gallons of syrup; thus the average yield was a little over three cups of syrup per tree. That said, yield per tree likely varies widely, depending on the size of the tree and the number of taps used per tree.

*Table vi: Maple production, reported totals and imputed estimates*

	Reported totals	Imputed estimates
<b>Number of producers</b>	13	13
<b>Total trees</b>	3,281	3,290
<b>Total gallons of syrup produced</b>	636	638

# Irrigation

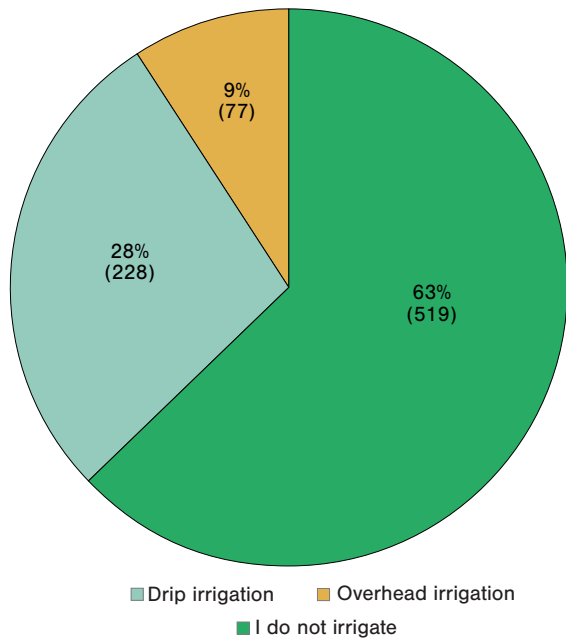


Figure vi: Use of irrigation (n=824)

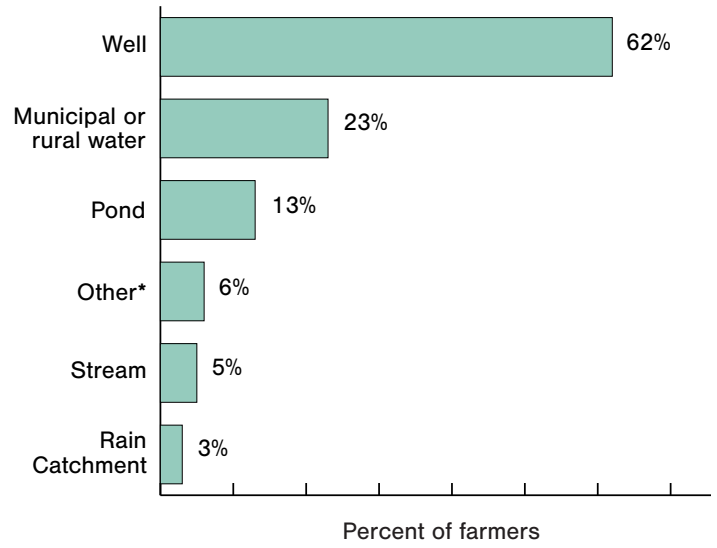


Figure vii: Sources of irrigation water (n=273)

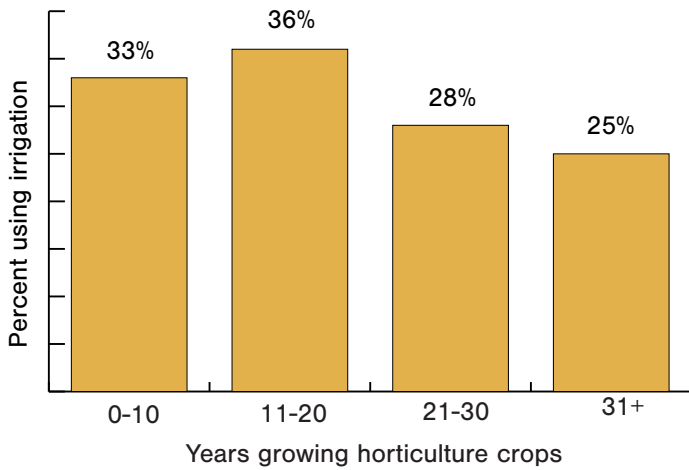


Figure viii: Percent of farmers using irrigation vs. years growing horticultural crops

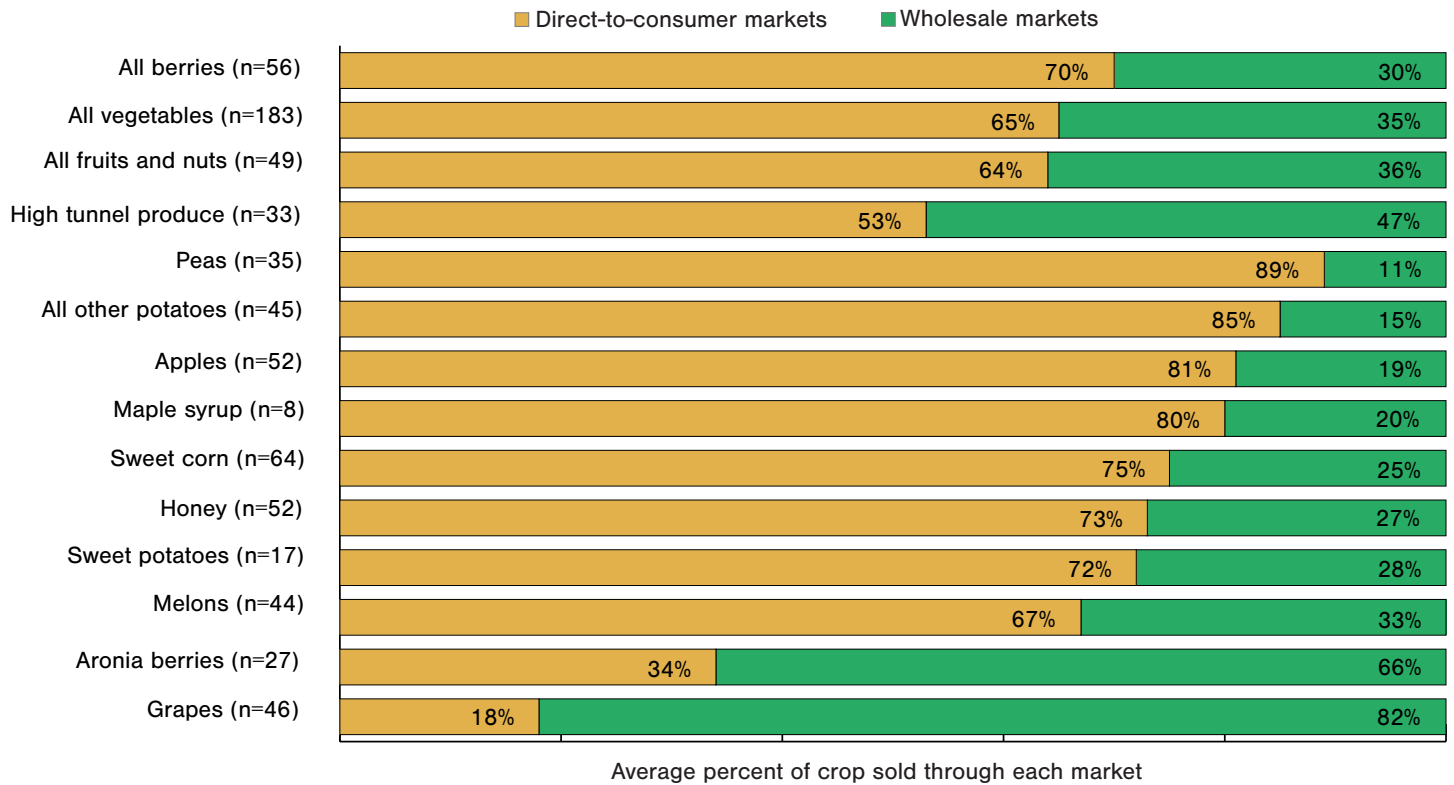


Figure ix: Average percent of crop sold through direct-to-consumer vs. wholesale markets

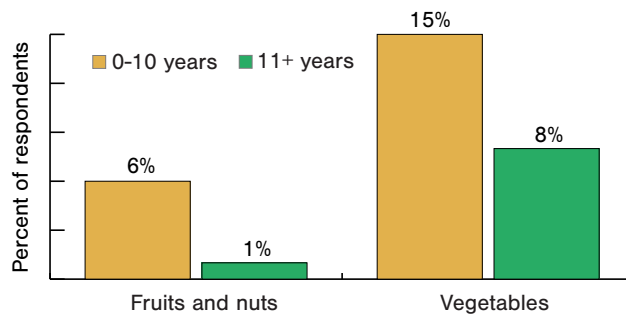


Figure x: Percent of growers selling exclusively through wholesale channels by years of experience, 2015

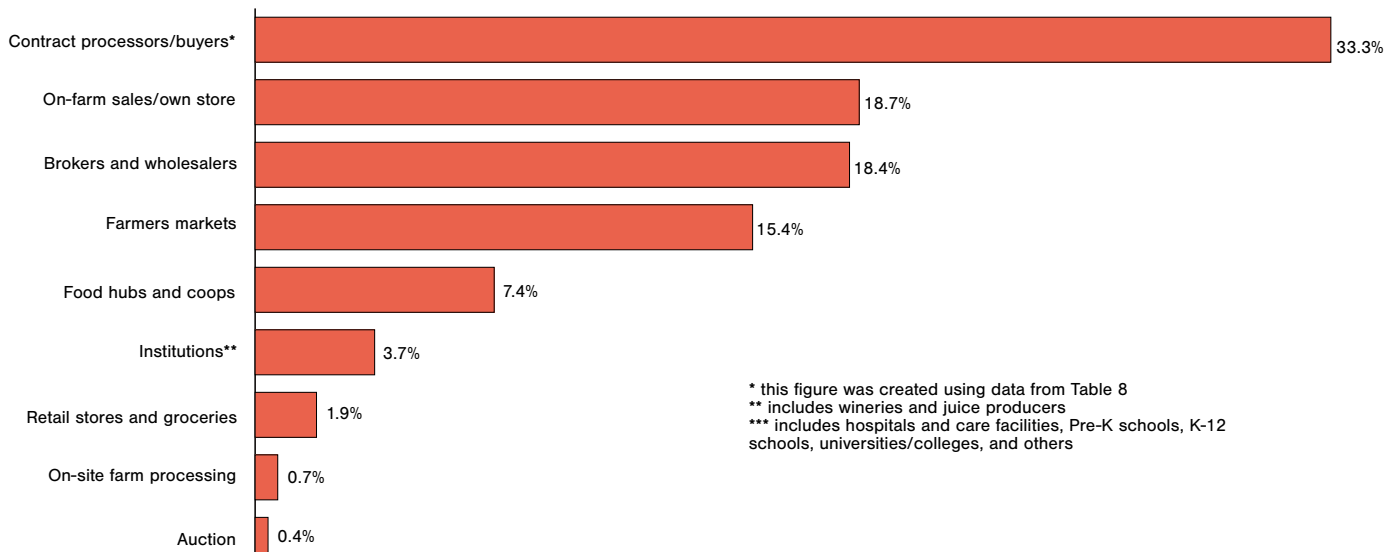
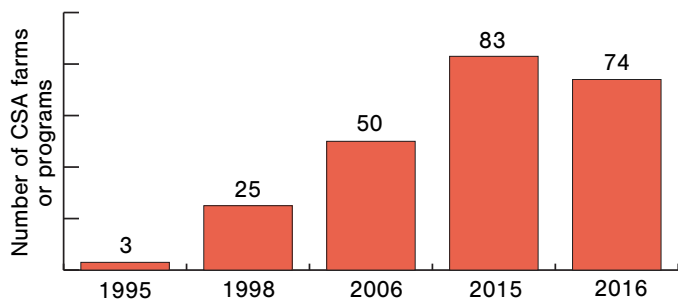


Figure xi: Average percent of aronia berry crop sold to each market



# CSAs



Data sources: Gladwell et al (1999); Martin-Schwarze et al (2006); Lyons & Trout (2015); and Lyons & Topaloff (2016)

Figure xii: Number of CSA farms and programs in Iowa

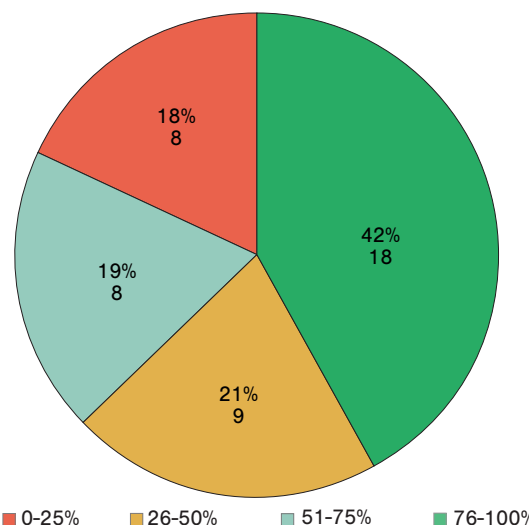


Figure xiii: Percent of total sales made via CSA (n=43)

Table vii: CSA farms vs. non-CSA farms

	CSA farms (n=61)	non-CSA farms (n=770)
Average years growing horticultural crops*	9.4	12.9
Average number of unique crops*	13	5
Average percent of gross income realized from horticultural crops sales**	24.7%	12.9%
Average acres in 2015	4.8	8.1
Average sales in 2015	\$26,428	\$26,234

\*statistically significant difference, alpha = .001

\*\*statistically significant difference, alpha=.05

Table viii: Summary of CSA shares offered (n=51)

	Spring	Summer	Fall
Number of farms offering shares	15	38	22
Total number of shares	486	2,948	1,084
Average number of shares per farm	32	78	49
Median price per full-share	\$133.00	\$402.50	\$165.00
Median price per half-share*	\$83.00	\$250.00	\$91.50

\*Not all CSA farms offered half shares. Spring, n=9; Summer, n=22; Fall, n=10.

# Advertising

Table ix: Farmers using advertising vs. those not using advertising

	Farmers using advertising	Farmers not using advertising
Average years growing horticultural crops	12.9	12.4
Average number of unique crops*	6	4
Average percent of gross income realized from the sale of horticultural crops*	16.5%	11.2%
Average acres in 2015	7.1	8.7
Average sales in 2015	\$24,806	\$28,703

\* Statistically significant difference, alpha = .001

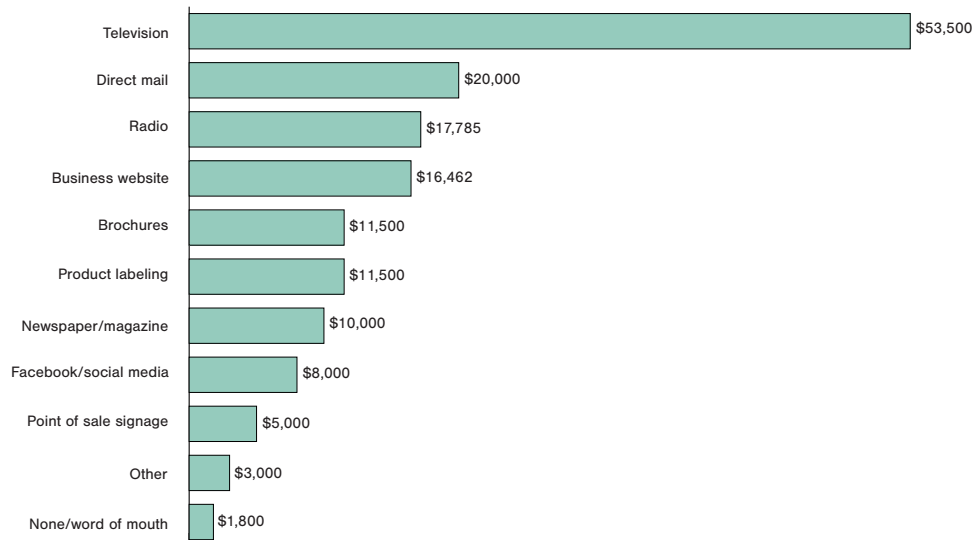


Figure xiv: Median sales of farmers using each advertising method

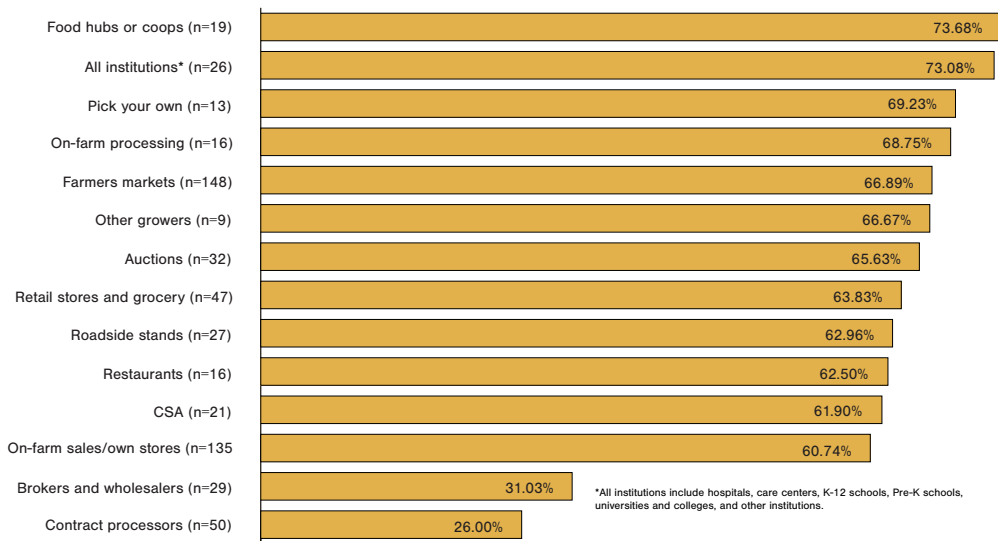
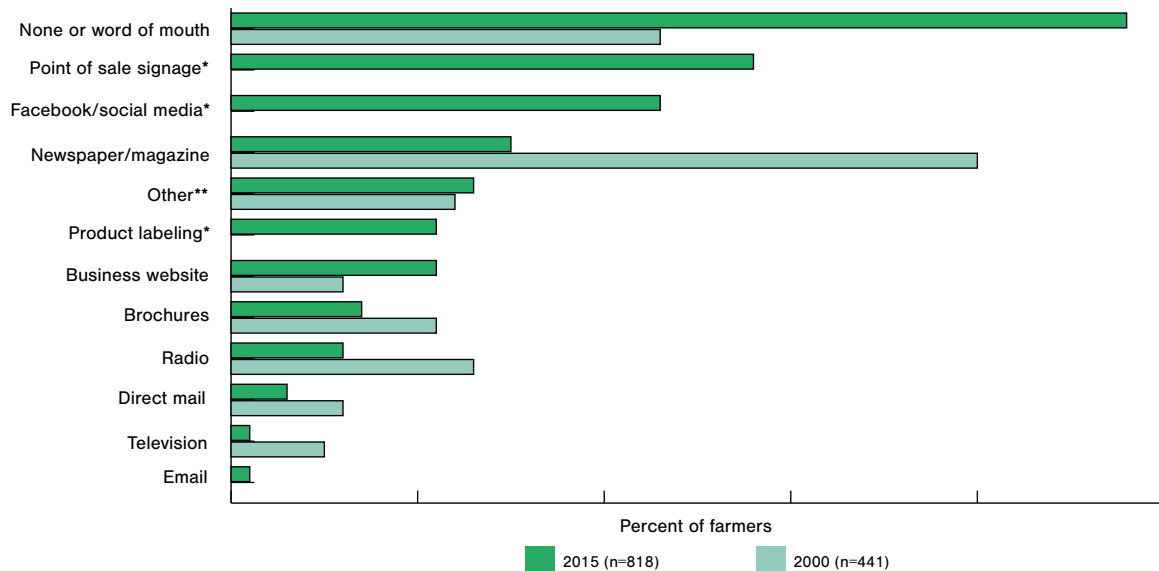


Figure xv: Percent of farmers selling through each market who use advertising



\* this choice was presented in 2015 only

\*\* includes telephone, Buy Fresh Buy Local directories, roadside signs, events, and non-specified.

Figure xvi: Percentage of farmers using each advertising method

## Processing

Table x: On-farm processing

	Total respondents	Total sales	Total sales made with out-of-state products	% of sales made with out-of-state products
Red wine	12	\$816,322	\$350,500	43%
White wine	12	\$709,365	\$74,000	10%
All other products*	13	\$426,998	\$234,000	55%
All baked goods*	18	\$100,790	\$12,323	12%
Canned & jarred goods*	22	\$47,357	\$2,369	5%
Apple juice & cider	10	\$35,382	\$0	0%
All aronia products	5	\$1,340	\$0	0%
All other juices*	3	\$20	\$0	0%
Hard cider	2	\$0		
<b>TOTAL</b>	<b>63</b>	<b>\$2,137,574</b>	<b>\$673,192</b>	<b>31%</b>

\*excluding all aronia products

## Resale

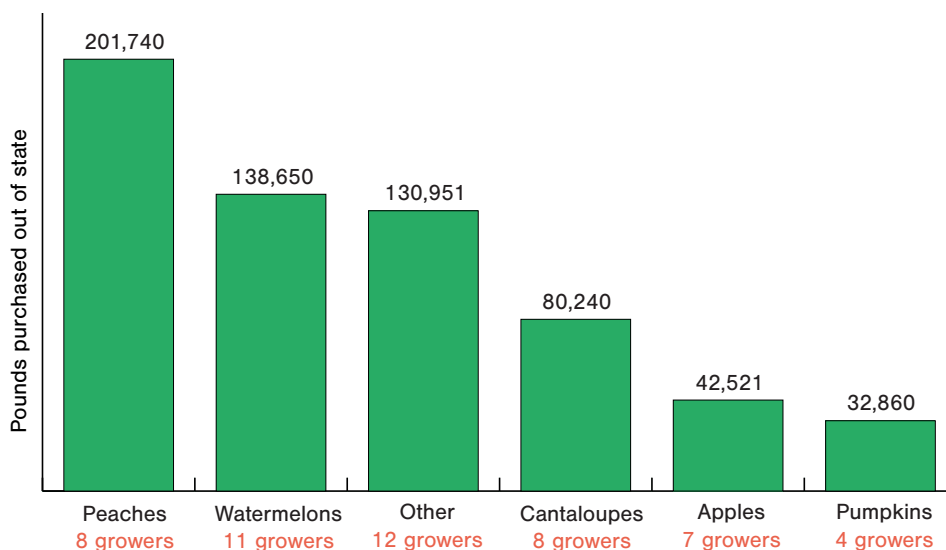


Figure xvii: Horticultural crops purchased from out of state for retail (n=34)

## Agritourism

Table xi: Revenue generated from agritourism activities

Number of farmers receiving revenue from agritourism in 2015 (n=773)	51 (7%)
Total revenue generated	\$2,820,544
Average	\$55,305
Median	\$7,000

# Appendix C: Survey Instrument

## 2015 Iowa Commercial Horticulture Survey for Food Crops

Dear Iowa Horticulture Food Crops Producer:

Please find attached the 2015 Iowa Commercial Horticulture Survey for Food Crops. I'm excited that a team effort has produced a new survey to capture the diversity, growth, and economic impact of horticultural food crop production in Iowa. It has been 15 years since producers were asked to complete a similar survey, and much has changed since that time in this rapidly growing sector of our agricultural economy. Reliable and current statistics are necessary if stakeholders are to make sound decisions. The data gathered will provide insights and guidance to producers, researchers, policy makers, agricultural-related businesses, and the public at large.

Your response is voluntary, but your cooperation is critical to develop an accurate assessment of horticultural food production and marketing in Iowa. The information you provide is confidential and will only be reported as totals or averages. If you have friends, neighbors, or colleagues whose production should be captured by this survey, please let them know they can acquire a survey by calling 515-242-6239 or going to <http://www.iowaagriculture.gov/agDiversification.asp> and requesting one online.

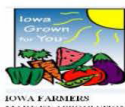
This survey was the result of a cooperative effort by many organizations. Many thanks for the funding support and in-kind assistance from the Iowa Farm Bureau, Iowa State University Extension & Outreach, the Leopold Center for Sustainable Agriculture, the Iowa Farmers Market Association, the Iowa Fruit & Vegetable Growers Association, and staff at the Iowa Department of Agriculture and Land Stewardship (IDALS). Vital input on the survey's content and design was provided by a Steering Committee that included staff from IDALS, Iowa State University Extension & Outreach, the Leopold Center for Sustainable Agriculture, the Iowa Field Office of the National Agricultural Statistics Service, Eat Greater Des Moines, and Practical Farmers of Iowa.

Please return the survey in the enclosed postage paid envelope. If you have any questions please call us at 515-242-6239. Thank you in advance for your cooperation in completing this survey!

Sincerely,



Bill Northey  
Iowa Secretary of Agriculture



**Edible horticulture crops refer to vegetables, fruits, berries, nuts, honey, maple syrup, herbs, all pumpkins, and ornamental gourds.**

1. Did you grow edible horticulture crops in Iowa in 2015 that were or will be for sale?

<sup>1001</sup>  Yes - Continue  No - Goto Question 20

2. In what county was most of your operation located in 2015? \_\_\_\_\_

1002

3. How many years have you grown edible horticulture crops for sale? .....

1003
------

4. How many acres of land did you use for edible horticulture production in 2015 and 2010? If you did not produce any horticulture products in 2010, please enter "0" for that year.....

2015	1004	_____
2010	1005	_____

5. What percent of your gross family income came from the sale of edible horticulture crops in 2015? .....

1006	_____ %
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6. What was the value of your total gross farm sales of edible horticulture products in 2015 and in 2010? (Do not include value added products or sales of products you purchased for resale. If you made no sales in 2010, please enter "0" for that year.)

2015	1007	\$ _____
2010	1008	\$ _____

7. In 2015, did you purchase any horticultural products from out of the state of Iowa to resell fresh (unprocessed) in Iowa? <sup>1009</sup>  Yes - answer questions 7a & 7b  No - goto Question 8

a. Please mark all items below which you purchased from another state for resale in Iowa and the quantity purchased in pounds of each unprocessed item

- 1010  Apples..... \_\_\_\_\_ lbs (1 Bushel = 40 lbs)
- 1011  Cantaloupes ..... \_\_\_\_\_ lbs (1 Bin = 600 lbs; 1 Carton = 40 lbs)
- 1012  Watermelons..... \_\_\_\_\_ lbs (1 Bin = 1,100 lbs; 1 Carton = 85 lbs)
- 1013  Peaches..... \_\_\_\_\_ lbs (1 Case = 20 lbs)
- 1014  Pumpkins ..... \_\_\_\_\_ lbs (1 Bin = 800 lbs)
- 1015  All other ..... \_\_\_\_\_ lbs

b. For which of the following reasons did you purchase edible horticultural products from out of state to resell in Iowa in 2015? (Choose all that apply.)

- 1016  To sell crops out of season
- 1017  To sell crops that do not grow well in Iowa
- 1018  To supplement my own crop, which failed or had lower than normal yield
- 1019  Other (please specify) \_\_\_\_\_
- 1020  To sell crops or varieties I do not grow
- 1021  Price
- 1022  My own planting of the crop or variety is not yet in production

8. In 2015, what was the total gross revenue you received for on-farm recreational and agri-tourism activities such as admission fees, farm tours, hospitality services, petting zoos, etc.? (Please enter "0" in the blank if you received no revenue from such activities.)

1023	\$ _____
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9. In 2015, how much did you spend for hired labor solely to produce

a. Vegetables and melons?.....

1024	\$ _____
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b. Fruits, berries, and nuts?.....

1025	\$ _____
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# VEGETABLES

10. In 2015, did you produce and sell fresh or processed vegetables?

<sup>3000</sup>  Yes - Complete this section  No - Go to Question 11

Crop	Code	Area Harvested				Production		
		Outside field or plots Sq. ft.	Outside field or plots Acres	Heated structures Sq. ft.	High tunnels and/or low tunnels Sq. ft.	Outside field or plots Pounds	Heated structures Pounds	High tunnels and/or low tunnel Pounds
		1	2	3	4	5	6	7
Asparagus	301x		•____					
Beans (green)	302x		•____					
Broccoli	303x		•____					
Cabbage	304x		•____					
Carrots	305x		•____					
Corn (sweet)	306x		•____					
Cucumbers (fresh or processing)	307x		•____					
Eggplant	308x		•____					
Garlic	309x		•____					
Gourds	310x		•____					
Herbs	311x		•____					
Lettuce	312x		•____					
Onions (dry)	313x		•____					
Peas	314x		•____					
Peppers (hot)	315x		•____					
Peppers (sweet)	316x		•____					
Potatoes	317x		•____					
Pumpkins (pie)	318x		•____					
Pumpkins (other)	319x		•____					
Spinach	320x		•____					
Squash (summer)	321x		•____					
Squash (winter)	322x		•____					
Sweet Potatoes	323x		•____					
Tomatoes	324x		•____					
<b>*Others: (enter code from list below)</b>								
Crop Name	Code							
			•____					
			•____					
			•____					

<b>CROP NAME</b>	<b>CODE</b>	<b>CROP NAME</b>	<b>CODE</b>	<b>CROP NAME</b>	<b>CODE</b>	<b>CROP NAME</b>	<b>CODE</b>
Beans (dry)	325x	Horseradish	331x	Okra	337x	Tomatillos	343x
Beets	326x	Kale	332x	Onions (green)	338x	Turnips	344x
Brussels Sprouts	327x	Kohlrabi	333x	Parsley	339x	Turnip Greens	345x
Cauliflower	328x	Leeks	334x	Radishes	340x	Others	346x
Collards	329x	Mushrooms	335x	Rhubarb	341x		
Daikon	330x	Mustard Greens	336x	Rutabaga	342x		

## FRUITS, NUTS, MAPLE SYRUP & HONEY (please see Question 12 for berries)

11. In 2015, did you produce and sell fresh or processed fruits, nuts, maple syrup or honey?

<sup>4000</sup>  Yes - Complete this section     No - Go to Question 12

Crop	Code	Production Area		Plants		Production
		Sq. ft.	Acres	Number of mature trees, shrubs, and vines, etc.	Number of trees, shrubs, and vines, etc. <b>not yet producing</b>	Total quantity in Pounds
		1	2	3	4	5
Apples	401x		• ____			
Grapes (Table)	402x		• ____			
Grapes (Wine)	403x		• ____			
Hops	404x		• ____			
Pears	405x		• ____			
Peaches	406x		• ____			
Tart Cherries	407x		• ____			
Watermelons	408x		• ____			
Cantaloupe/Muskmelons	409x		• ____			
Other Melons	410x		• ____			
Chestnuts	411x		• ____			
Hazelnuts	412x		• ____			
Walnuts	413x		• ____			
<b>*Others: (enter code from list below)</b>						
<b>Crop Name</b>	<b>Code</b>					
			• ____			
			• ____			
			• ____			
			• ____			
<b>Maple syrup</b>		414			415	
		Number of Trees: _____			Gallons of syrup: _____	
<b>Honey</b>		416			417	
		Number of Colonies: _____			Pounds of honey: _____	

CROP NAME	CODE
Apricots	418x
Plums	419x
Butternuts	420x
Pecans	421x
Others	422x

## BERRIES

12. In 2015, did you produce and sell fresh or processed berries?

5000

Yes - Complete this section

No - Go to Question 13

Crop	Code	Production Area			Plants		Production	
		Outside field or plots Sq. ft.	OR Outside field or plots Acres	High tunnels and/or low tunnels: Sq. ft.	Number of mature plants	Number of plants not yet producing	Outside field or plots Pounds	High tunnels and/or low tunnel Pounds
		1	2	3	4	5	6	7
Aronia berries	501x		•____					
Blueberries	502x		•____					
Blackberries	503x		•____					
Raspberries	504x		•____					
Strawberries (June bearers)	505x		•____					
Strawberries (day neutral/ever-bearers)	506x		•____					
<b>*Others: (enter code from list below)</b>								
Crop Name	Code							
			•____					
			•____					
			•____					

### CROP NAME

### CODE

Currants	507x
Elderberries	508x
Gooseberries	509x
Mulberries	510x
Others	511x

13. Please indicate: 1) the value of your 2015 **gross sales** of processed, value-added food products which you processed yourself or someone else custom processed for you, and 2) the percent of processed food products that were made using out of state horticulture products. (Do not include gross sales of products you custom processed for another grower. Do not include processed products you purchased for resale.)

Finished/Processed Product	Code	Gross sales of processed goods	Percent made with products grown out of state
		1	2
Apple juice & cider	512x	\$	%
Hard cider	513x	\$	%
All other juices*	514x	\$	%
Red wine	515x	\$	%
Whitewine	516x	\$	%
All Aronia products	517x	\$	%
All baked goods*	518x	\$	%
Canned & jarred goods*	519x	\$	%
All other products*	520x	\$	%

\*Excluding all Aronia products



**PERCENT OF PRODUCTION SOLD THROUGH VARIOUS MARKETING OUTLETS**

14. Please complete the table below by indicating the percent of production you sold through each market outlet in 2015 for each specific crop (Section A) and for broad product categories (Section B). Numbers in each column used should add to 100%.

Market Outlets	Code	Section A												Section B			
		01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	
		Apples	Aronia Berries	Grapes	Honey	Hops	Maple Syrup	Melons	Peas	Sweet Corn	Sweet Potatoes	All Other Potatoes	High Tunnel Produce	All Berries	All Fruits and Nuts	All Vegetables	
Auction	61xx %																
Brokers and wholesalers	62xx %																
Community Supported Agriculture (CSA) farms	63xx %																
Contract processors and buyers (includes wineries and juice producers)	64xx %																
Farmers market	65xx %																
Food hubs and coops	66xx %																
Institutions: hospitals and other care facilities	67xx %																
Institutions:																	
Pre-K schools	68xx %																
K through 12 schools	69xx %																
Universities/colleges	70xx %																
Other institutions (please specify):																	
On farm sales/own store	71xx %																
Online sales	72xx %																
On-site farm processing	73xx %																
Other growers	74xx %																
Pick your own	75xx %																
Restaurants	76xx %																
Retail stores and groceries	77xx %																
Roadside stand	78xx %																
<b>TOTAL</b> .....	79xx %	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	

## DOLLAR VALUE OF 2015 SALES THROUGH VARIOUS MARKETING OUTLETS

15. Please complete the table below by specifying the dollar value of each specific crop (Section A) and of the broad product categories (Section B) sold through each of the various market outlets in 2015.

Market Outlets	Code	Section A											Section B			
		Apples	Aronia Berries	Grapes	Honey	Hops	Maple Syrup	Melons	Peas	Sweet Corn	Sweet Potatoes	All Other Potatoes	High Tunnel Produce	All Berries	All Fruits and Nuts	All Vegetables
Auction	81xx	\$														
Brokers and wholesalers	82xx	\$														
Community Supported Agriculture (CSA) farms	83xx	\$														
Contract processors and buyers (includes wineries and juice producers)	84xx	\$														
Farmers market	85xx	\$														
Food hubs and coops	86xx	\$														
Institutions: hospitals and other care facilities	87xx	\$														
Institutions:																
PreK schools	88xx	\$														
K through 12 schools	89xx	\$														
Universities/colleges	90xx	\$														
Other institutions (please specify):																
On farm sales/own store	91xx	\$														
Online sales	92xx	\$														
On-site farm processing	93xx	\$														
Other growers	94xx	\$														
Pick your own	95xx	\$														
Restaurants	96xx	\$														
Retail stores and groceries	97xx	\$														
Roadside stand	98xx	\$														
	99xx	\$														

16. How did you advertise your edible horticulture crop(s) or product(s) in 2015? *(Please choose all that apply.)*

- |      |  |      |   |
|------|--|------|---|
| 1026 | <input type="checkbox"/> Product labeling                      | 1032 | <input type="checkbox"/> Television       |
| 1027 | <input type="checkbox"/> Radio                                 | 1033 | <input type="checkbox"/> Brochures        |
| 1028 | <input type="checkbox"/> Point of sale signage                 | 1034 | <input type="checkbox"/> Business website |
| 1029 | <input type="checkbox"/> Facebook or other social media outlet | 1035 | <input type="checkbox"/> Direct mail      |
| 1030 | <input type="checkbox"/> Newspaper/magazine                    | 1036 | <input type="checkbox"/> None             |
| 1031 | <input type="checkbox"/> Other - please specify _____          |      |   |

17. Irrigation:

- a. Please select the type of irrigation at your farm in 2015:
- 1037  Drip irrigation
- 1038  Overhead irrigation (stationary sprinkler, hose pull sprinkler, etc.)
- 1039  I did not irrigate *(please skip to question 18)*
- b. In 2015, what was the source of your irrigation water? *(Please choose all that apply.)*
- 1040  Pond
- 1041  Well
- 1042  Other *(please specify)* \_\_\_\_\_
- 1043  Stream
- 1044  Municipal Water

18. In 2015, did you grow any crops through the use of:

- 1045 Aquaponics?.....  Yes....  No
- 1046 Hydroponics? ....  Yes....  No

19. In 2015, did you direct market produce through a Community Supported Agriculture program (CSA)?

- 1047  Yes *(Please answer 19a-19d)*     No *(Please skip to Question 20)*

- a. If yes, what was the total number of shares per season?
- b. What was the seasonal cost for a full share?
- c. What was the seasonal cost for a half share?
- 1057  I do not offer half shares
- d. What percent of your gross sales came from your CSA?

	Spring	Summer	Fall
1048		1051	1054
1049		1052	1055
1050		1053	1056

1058	%
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20. If you answered "no" to Question #1, please specify the reason(s) you did NOT grow or sell edible horticulture crops in Iowa in 2015. *(Please choose all that apply.)*

- 1059  I quit farming.
- 1060  I retired from farming.
- 1061  I farmed in 2015, but quit producing edible horticulture crops.
- 1062  I grew edible horticulture crops in a state OTHER than Iowa.
- 1063  I grew edible horticulture crops but did NOT sell them.
- 1064  My edible horticulture crops failed in 2015.
- 1065  Other *(please specify)* \_\_\_\_\_

*THANK YOU FOR YOUR PARTICIPATION*

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# 2015 Iowa Commercial Horticulture Survey

Appendices A, B, and C



IOWA STATE UNIVERSITY  
Extension and Outreach

