

2023 IOWA COMMERCIAL HORTICULTURE SURVEY FOR FOOD CROPS

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Section 1 - Crop Sales

1. Did you grow **fruits, vegetables, berries, nuts, honey, maple syrup, herbs, mushrooms, pumpkins, or ornamental gourds** in Iowa in 2023 that were or will be for sale?

504

Yes - Continue

No - Go to Section 6

Acres

505

2. How many acres of land did you use in 2023 to produce the crops listed in question 1?.....

Years

506

3. How many years have you grown the crops or products mentioned in question 1 for sale?.....

Dollars

507

4. What was the **total gross farm sales** of the crops or products mentioned in question 1 in 2023?
(EXCLUDE value added products or sales of products you purchased for resale.).....

Percent

508

5. What percent of your gross household income in 2023 came from the sale of crops or products mentioned in question 1?.....

Section 1 - Crop Sales (continued)

6. Were any of the fruits, vegetables, berries, nuts, honey, maple syrup, herbs, mushrooms, pumpkins, or ornamental gourds that you produced in 2023 covered by any federal crop insurance policy (including Whole Farm Revenue Protection and Micro Farm Insurance policies)?

509

 Yes No

7. In 2023, did you purchase any fruits, vegetables, berries, nuts, honey, maple syrup, herbs, mushrooms, pumpkins or ornamental gourds to resell?

510 Yes - Continue No - Go to Question 9

8. What was the dollar value of the crops or products you purchased to resell?

511 \$1 to \$1,000 \$1,001 to \$5,000 \$5,001 to \$10,000 \$10,001 to \$15,000 \$15,001 to \$20,000 \$20,001 to \$25,000 \$25,001 to \$30,000 \$30,001 to \$40,000 \$40,001 or above

9. Please indicate the value of your 2023 **gross sales** of processed, value-added food products which you processed yourself or someone else custom processed for you. **EXCLUDE** gross sales of products you custom processed for another grower. **EXCLUDE** processed products you purchased for resale.

Finished/Processed Product	Gross Sales of Processed Goods (Dollars)
a. Apple juice & cider.....	512
b. Hard cider.....	513
c. Red wine.....	514
d. White wine.....	515
e. Other fruit wines.....	516
f. All baked goods.....	517
g. Canned & jarred goods.....	518
h. All other products.....	519

Section 1 - Crop Sales (continued)

10. In the table below, please identify the markets where you sold fruits, vegetables, berries, nuts, honey, maple syrup, herbs, mushrooms, pumpkins, or ornamental gourds and estimate the percentage of total sales value generated from that market in 2023. **Percentages by market type should add to 100%.**

Market	For the market on the left, in 2023 did you sell products you grew through this market?	If yes, please estimate percentage of total sales value generated in this market (Percent)
a. Auction	520 1 <input type="checkbox"/> Yes 3 <input type="checkbox"/> No	521
b. Brokers and wholesalers	522 1 <input type="checkbox"/> Yes 3 <input type="checkbox"/> No	523
c. Community Supported Agriculture (CSA)	524 1 <input type="checkbox"/> Yes 3 <input type="checkbox"/> No	525
d. Farmers market	526 1 <input type="checkbox"/> Yes 3 <input type="checkbox"/> No	527
e. Food hubs	528 1 <input type="checkbox"/> Yes 3 <input type="checkbox"/> No	529
f. Institutions: hospitals and other care facilities	530 1 <input type="checkbox"/> Yes 3 <input type="checkbox"/> No	531
g. Institutions: Pre K schools, K through 12 schools, and universities/colleges	532 1 <input type="checkbox"/> Yes 3 <input type="checkbox"/> No	533
h. On-farm sales/own store	534 1 <input type="checkbox"/> Yes 3 <input type="checkbox"/> No	535
i. Online sales	536 1 <input type="checkbox"/> Yes 3 <input type="checkbox"/> No	537
j. On-site farm processing	538 1 <input type="checkbox"/> Yes 3 <input type="checkbox"/> No	539
k. Other growers	540 1 <input type="checkbox"/> Yes 3 <input type="checkbox"/> No	541
l. Pick your own	542 1 <input type="checkbox"/> Yes 3 <input type="checkbox"/> No	543
m. Processors (includes canneries, freezing, fresh cut processors, wineries and juice producers)	544 1 <input type="checkbox"/> Yes 3 <input type="checkbox"/> No	545
n. Restaurants	546 1 <input type="checkbox"/> Yes 3 <input type="checkbox"/> No	547
o. Retail stores and groceries	548 1 <input type="checkbox"/> Yes 3 <input type="checkbox"/> No	549
p. Roadside stand	550 1 <input type="checkbox"/> Yes 3 <input type="checkbox"/> No	551
Total (Should equal 100%)		100%

11. How did you advertise fruits, vegetables, berries, nuts, honey, maple syrup, herbs, mushrooms, pumpkins, or ornamental gourds you grew in 2023? **(Choose all that apply.)**

- 552 Product labeling
- 553 Radio
- 554 Point of sale signage
- 555 Facebook or other social media outlet
- 556 Newspaper/magazine
- 557 Word of mouth
- 558 Television
- 559 Brochures
- 560 Business website
- 561 Direct mail
- 562 None
- 566 Other (please specify:⁵⁶³ _____)

12. If you sold any of the crops listed in Question 11 in 2023 to a processor, did you have a production contract with the processor?

- 564 1 Yes
- 3 No
- 2 Both (I sold some under a production contract and some without a contract)

Section 2 - Feasibility of Processing Iowa - grown Fruits and Vegetables

1. Do you have any interest in selling raw farm products to local processors focused on minimally processed local fruits and vegetables, such as fresh-cut, frozen, or canned products?
- 565 ₁ Yes ₂ Maybe ₃ No - Go to Question 4
2. Of the crops you are currently producing, which would you be interested in selling to a processor and estimate how much would you be willing to sell annually? (Using the Target Crops and Codes table below, please fill in the table on page 5 with your responses.)

Target Crops and Codes

Vegetable crop	Code	Fruit crop	Code
Asparagus	418	Apples	125
Beans (green)	381	Pears	233
Beets	383	Peaches	227
Broccoli	385	Tart Cherries	589
Cabbage	391	Watermelons	473
Cauliflower	399	Cantaloupe/Muskmelons	395
Carrots	397	Other Melons	480
Corn (sweet)	461	Chestnuts	326
Cucumbers	411	Hazelnuts	329
Eggplant	415	Walnuts	359
Kohlrabi	870	Aronia berries	2207
Lettuce	428	Blueberries	2212
Okra	437	Blackberries	2209
Onions (dry)	433	Raspberries	4270
Peas	441	Strawberries	2236
Peppers (hot)	445		
Peppers (sweet)	443	Honey	841
Potatoes	97	Maple Syrup	800
Radish	451	Other	481
Rhubarb	440		
Rutabaga	477		
Spinach	457		
Squash (summer)	459		
Squash (winter)	460		
Sweet Potatoes	100		
Tomatoes	463		
Turnips	465		
Zucchini	450		

Section 2 - Feasibility of Processing Iowa - grown Fruits and Vegetables (continued)

3. Of the crops you are currently producing, do you have any interest in selling to a processor and estimate how much would you be willing to sell annually?

1 L I N E	2 Crop Name	3 Crop code (from list on Page 4)	4 Potential annual sales to processor per year in pounds (Pounds)
01		566	567
02		566	567
03		566	567
04		566	567
05		566	567
06		566	567
07		566	567
08		566	567
09		566	567
10		566	567
11		566	567
12		566	567
13		566	567
14		566	567
15		566	567
16		566	567
17		566	567
18		566	567
19		566	567
20		566	567
21		566	567
22		566	567

TABLE 001

OFFICE USE LINES IN TABLE

568

Section 2 - Feasibility of Processing Iowa - grown Fruits and Vegetables (continued)

4. Are you interested in utilizing custom processing services (co-packing/co-bottling) to further process the products you grow, where you would own and sell the final product?
- 569 ₁ Yes
₂ Maybe
₃ No - Go to Question 1 Section 3
5. What types of processing services are you interested in accessing from a custom processor (co-packer/co-bottler)?
(Choose all that apply.)
- 570 Frozen
571 Canned
572 Fresh cut (slice and dice)
573 Dried
574 Bottled
575 Other (please specify ⁵⁷⁶_____)
6. Do you have markets identified for the processed products you're interested in having made at a custom processor?
- 577 ₁ Yes ₃ No
7. Do you have in place any of the following activities that may support your readiness for selling wholesale to a processor? **(Choose all that apply.)**
- 578 ₁ Understanding of USDA grade standards and standard packaging requirements
579 ₂ Liability insurance
580 ₃ On-farm food safety plan
581 ₄ Pre season planning

Section 3 - Irrigation

1. Did you use irrigation in 2023?

582 ₁ Yes - Continue ₃ No - Go to Section 4

2. Please select the type(s) of irrigation used at your farm in 2023. **(Choose all that apply.)**

583 ₁ Drip irrigation

657 ₂ Overhead irrigation (stationary sprinkler, hose pull sprinkler, etc.)

3. Have you ever used overhead irrigation for frost protection?

584 ₁ Yes ₃ No

4. In 2023, what was the source of your irrigation water? **(Choose all that apply.)**

585 Pond or lake

586 Driven/sand point well

587 Bored or drilled well

588 Stream

589 Municipal Water

590 Rainwater collection

Section 4 - Production Practices

1. Did you implement a pesticide spray schedule in 2023?

- 591 1 Yes, calendar based
 2 2 Yes, pest modeling based
 3 3 No

2. If you grew fruits, vegetables, berries, nuts, herbs, pumpkins, or ornamental gourds in 2023, what species of cover crops did you plant on fields used for horticultural crop production? **(Choose all that apply.)** If you did not grow any horticultural crops in 2023 please go to Section 5.

- 592 None - Go to Question 4
 593 Cereal rye
 594 Hairy vetch
 595 Oats
 596 Field peas
 597 Buckwheat
 598 Cowpea
 599 Sorghum sudangrass
 600 Other (Please specify:⁶⁰¹_____)

3. What month(s) did you establish a cover crop in 2023? **(Choose all that apply.)**

- 700 January
 701 February
 702 March
 703 April
 704 May
 705 June
 706 July
 707 August
 708 September
 709 October
 710 November
 711 December

4. How often do you test for fertility using the following methods?

	Never	More than once per year	Annually	Every 2 years	Every 3 years
a. Soil testing 602	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
b. Plant sap testing 603	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
c. Plant tissue testing 604	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

Section 4 - Production Practices (continued)

5. Do you use any of these technologies or mechanizations on your farm? **(Choose all that apply.)**

- 605 Automatic weeder
- 606 Mechanical cultivator
- 607 Flame weeder
- 608 Finger/rotary weeder
- 609 Electrical weeder (aka weed zapper)
- 610 Large volume sprayer
- 611 Small volume sprayer
- 612 Precision sprayer
- 613 Pest/disease forecasting
- 614 Weather station
- 615 Soil moisture sensor
- 616 Temperature sensor
- 617 Frost protection
- 618 Mechanical harvester
- 619 Post-harvest washer/sorter
- 620 Post-harvest refrigeration
- 621 Plasticulture
- 622 Drip irrigation
- 623 Fertilizer injector
- 624 Mechanical transplanter
- 625 Aerial drones
- 626 None of the above

Section 5 - Labor

1. Did you utilize any of the following forms of unpaid labor on your farm in 2023? **(Choose all that apply.)**

- 627 Regular volunteers, 10 or more
- 628 Regular volunteers, fewer than 10
- 629 Unpaid family members
- 630 Work days, 10 or more volunteers
- 631 Word days, fewer than 10 volunteers
- 632 Work trade (such as trading labor with other farmers or exchanging produce for labor)
- 633 None of the above

2. In 2023, how much did you spend for hired labor solely to produce:

- a. Vegetables and melons?.....
- b. Fruits, berries, and nuts?.....

Dollars	
	656
	657

Section 5 - Labor (continued)

3. How has your reliance on unpaid labor changed compared with pre-COVID prior to March 2020?

- 634 Increased significantly
 Increased a little
 Stayed the same
 Decreased a little
 Decreased significantly
 Not applicable

4. Since the COVID-19 pandemic (March 2020) has it been more difficult to find and pay labor?

- 635 1 Yes
 2 No, my operation has **always** had challenges with finding and paying labor.
 3 No, pandemic disruptions have not impacted my ability to find and pay labor.

5. Which challenges, if any, have you experienced in accessing paid labor? **(Choose all that apply.)**

- 636 Cannot afford paid labor/paying labor cuts into profits
637 Small labor pool
638 Lack of quality labor
639 Cost of hourly labor has gone up
640 None of the above

6. Which of the following do you/your farm participate in? **(Choose all that apply.)**

- 641 We accept Supplemental Nutrition Assistance Program (SNAP aka food stamps) as payment
642 We accept Double Up Food Bucks as payment
643 We accept WIC and Senior Farmers Market Nutrition Program vouchers as payment
644 We donate fruits or vegetables to food banks, pantries, or other community food entities
645 We allow people with lower incomes to barter or trade labor for produce
646 We participate in the Local Food Procurement Program
647 None of the above

Section 6 - Conclusion

1. **If you answered “No” to Section 1, Question 1**, please specify the reason(s) you did NOT grow or sell fruits, vegetables, berries, nuts, honey, maple syrup, herbs, mushrooms, pumpkins, or ornamental gourds in Iowa in 2023.

(Choose all that apply.)

648 I quit farming.

649 I retired from farming.

650 I farmed in 2023, but quit producing the aforementioned crops.

651 I grew those crops in a state OTHER than Iowa.

652 I grew those crops but did NOT sell them.

653 My crops failed in 2023.

654 Other (please specify: ⁶⁵⁵ _____)

Thank you for your time. Please return this questionnaire in the enclosed envelope.

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