

2024 VEGETABLE CHEMICAL USE SURVEY

OMB No. 0535-0218
Approval Expires: xx/xx/20xx
Project Code: 136
SurveyID: 2069



**NATIONAL
AGRICULTURAL
STATISTICS
SERVICE**

USDA/NASS

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ENTERPRISE

VERSION 01	POID ____	SUBTRACT ____
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CONTACT RECORD

DATE	TIME	NOTES

INTRODUCTION:

[Introduced yourself, and ask for the operator. Rephrase in your own words.]

We are collecting information on chemical use and pest management practices and need your help to make the information as accurate as possible. The information you provide will be used for statistical purposes only. Your responses will be kept confidential and any person who willfully discloses any identifiable information about you or your operation is subject to a jail term, a fine, or both. This survey is conducted in accordance with the Confidential Information Protection provisions of Title V, Subtitle A, Public Law 107-347 and other applicable Federal laws. For more information on how we protect your information please visit: <https://www.nass.usda.gov/confidentiality>. Response is voluntary.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control number is 0535-0218. The time required to complete this information collection is estimated to average 60 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

We encourage you to refer to your farm records during the interview.

H H M M

004

BEGINNING TIME [MILITARY].....

☐ Name, address, and partners verified and updated if necessary.

During the screening phase of the Vegetable Chemical Use Survey conducted in June and July, your operation was found to be growing or intending to grow vegetables this year. I now need to verify some of the information collected during the screening survey.

Verify operation name and operator on label and/or screener.

- If no changes, go to Section A, page 4.
- If changed, continue to Change in Operating Status on next page.

CHANGE IN OPERATOR STATUS

[Enumerator Note: Skip this section if there is no change in operation name or operator.]

1. Has there been a change in operation name or operator?

023 ₁ ☐ Yes – Continue

₃ ☐ No – Go to Enumerator Note below.

Operation Name _____	
Operator Name _____	
Address _____	

Phone (_____) _____	☐ Check if cell phone

[Enumerator Note: If the operation on the face page was in business part of the 2024 crop year, complete this questionnaire for the part of the year during which the operation did business, unless the operation has been taken over by a new operator. If the operator has changed midyear, please conduct this interview start to finish with the new operator after reading "Valid Substitution" rules in section 4 of the Interviewer's Manual.]

2. Has the operation printed on this questionnaire been combined or merged with any other farming operations?

₁ ☐ Yes – Go to Conclusion

₃ ☐ No – Continue

SCREENING

1. Did this operation have any of the target crops during the 2024 crop year? [See page 5 for target crops.]

¹ ☐ Yes – Continue

³ ☐ No – Write notes explaining the situation, then Go to Conclusion.

2. Are the day-to-day decisions for this operation (name on label) made by — [Check one]

¹ ☐ one individual? [Go to Section A]

⁸ ☐ a hired manager? [Go to Section A]

² ☐ partners? [Continue]

3. How many individuals are involved in the day-to-day decisions of this operation? [Enter the number of partners, including the partner named on the label. Identify the other persons in this partnership below, then go to Section A. Partners jointly operate land and share in decision making. Do not include landlords and tenants as partners.....]

Number

4. Please identify the other person(s) in this partnership, then go to Section A. Verify partners' names and make necessary corrections if names have already been entered.

☐ Check if verified POID _____
 Name: _____
 Address: _____
 City: _____ State: _____ Zip: _____

check if
cell phone

 Phone: (____) _____ ☐

☐ Check if verified POID _____
 Name: _____
 Address: _____
 City: _____ State: _____ Zip: _____

check if
cell phone

 Phone: (____) _____ ☐

☐ Check if verified POID _____
 Name: _____
 Address: _____
 City: _____ State: _____ Zip: _____

check if
cell phone

 Phone: (____) _____ ☐

☐ Check if verified POID _____
 Name: _____
 Address: _____
 City: _____ State: _____ Zip: _____

check if
cell phone

 Phone: (____) _____ ☐

A**LAND OPERATED****A**

Acres Operated

[Enumerator Action: If acreage on the insert is verified as correct, enter code 1 in box 801, then skip to Section B. If acreage has changed, ask all questions.].....

801

Now I would like to ask about the total acres operated under this land arrangement.

1. How many acres does this operation —

Acres

a. own?.....

+

901

.____

b. rent or lease from others or use rent free? EXCLUDE land used on an animal unit month (AUM) basis.....

+

902

.____

c. rent to others?.....

-

905

.____

2. [Calculate item 1a + 1b - 1c.] Then the total acres operated are:

=

900

.____

a. Does this include the farmstead, all cropland, woodland, pastureland, wasteland, and government program land?

¹ ☐ Yes – Continue

³ ☐ No – Make corrections, then continue.

The remaining questions in this survey refer to these (item 2) acres.

3. Of the total acres operated, how many acres are considered cropland? INCLUDE land in hay, summer fallow, cropland idle, cropland used for pasture, and cropland in government programs.....

802

.____

4. Of the total acres operated, how many acres are vegetables? INCLUDE both target and non-target vegetables planted on the operation.....

803

.____

TARGET CROPS & CODES

FLORIDA

613	Beans, Snap
808	Cabbage
766	Corn, Sweet
798	Cucumbers
736	Peppers, Bell
742	Squash
770	Tomatoes
752	Watermelons

GEORGIA

613	Beans, Snap
808	Cabbage
766	Corn, Sweet
798	Cucumbers
824	Onions
736	Peppers, Bell
742	Squash
752	Watermelons

ILLINOIS

613	Beans, Snap
738	Pumpkins

INDIANA

738	Pumpkins
752	Watermelons

MICHIGAN

701	Asparagus
613	Beans, Snap
798	Cucumbers
742	Squash

MINNESOTA

766	Corn, Sweet
855	Peas, Green

NEW JERSEY

736	Peppers, Bell
742	Squash

NEW YORK

613	Beans, Snap
808	Cabbage
766	Corn, Sweet
824	Onions
738	Pumpkins
742	Squash

NORTH CAROLINA

798	Cucumbers
736	Peppers, Bell
738	Pumpkins
742	Squash
752	Watermelons

OHIO

738	Pumpkins
-----	----------

OREGON

613	Beans, Snap
766	Corn, Sweet
824	Onions
855	Peas, Green
742	Squash

PENNSYLVANIA

613	Beans, Snap
738	Pumpkins

TEXAS

808	Cabbage
798	Cucumbers
824	Onions
738	Pumpkins
752	Watermelons

WASHINGTON

701	Asparagus
632	Carrots
766	Corn, Sweet
824	Onions
855	Peas, Green

WISCONSIN

613	Beans, Snap
808	Cabbage
632	Carrots
766	Corn, Sweet
798	Cucumbers
855	Peas, Green

B**VEGETABLE ACREAGE****B**

1. What target vegetable crops were on these [Section A, item 4] acres during the 2024 crop year? EXCLUDE new plantings of vegetables not intended for harvest in 2024.

Table
001Office Use
Lines in Table

Line 99

199

L I N E	1	2	3	4	5
	Crop	Crop Code	How many acres were planted for harvest in the 2024 crop year? (INCLUDE 2024 acres which were planted in other years.) Acres	Were any commercial fertilizers applied to this crop? Yes = 1 No = 3	Were any herbicides, insecticides, fungicides, etc. applied to this crop? Yes = 1 No = 3
01			11 _____	12	13
02			11 _____	12	13
03			11 _____	12	13
04			11 _____	12	13
05			11 _____	12	13
06			11 _____	12	13
07			11 _____	12	13
08			11 _____	12	13
09			11 _____	12	13
10			11 _____	12	13
11			11 _____	12	13
12			11 _____	12	13
13			11 _____	12	13
14			11 _____	12	13
15			11 _____	12	13

INCLUDE

- Target Crops Only
- All acreage of target crops for processing or fresh market.
- All acreage equal to or greater than one tenth of an acre.
- All acreage of target crops for roadside stands, farmer's markets, or U-pick sales.
- Crops planted in the fall of 2023 if they were part of the 2024 crop.
- Double cropping

EXCLUDE

- All crops grown in another state.
- All crops grown in greenhouses, hothouses, and home gardens.
- Plantings of crops not intended for harvest in 2024.
- New plantings and other plantings which are not yet bearing (asparagus).
- All vegetables grown for commercial transplanting.
- All mushrooms, potatoes, dry beans, sweet potatoes.
- All vegetable acreage grown for seed only.
- All vegetable acres grown by institutional, experimental, research, and university farms.
- Non-target vegetables

Notes:

Enumerator Note--

If column 4 of the table in Section B is Yes for any crops, continue with item 1.

If column 4 of the table in Section B is No for all crops, go to Section D, page 10.

1. I need to record complete information on all commercial fertilizers applied to the target vegetables grown during the 2024 crop year. INCLUDE all applications regardless of how they were applied such as irrigation water, foliar applications, etc. Record amount of an analysis of fertilizers applied or pounds of actual plant nutrients applied. Complete the table below and any necessary supplemental fertilizer tables. EXCLUDE micronutrients, lime, and gypsum.

Office Use Lines in Table	Table 001	299
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LINE	1	2	3	4	5	6	7	8	9	10
	Crop	Crop Code	N NITROGEN	P ₂ O ₅ PHOSPHATE	K ₂ O POTASH	S SULFUR	How much was applied per acre per application? [Leave this column blank if actual nutrients were reported.]	Unit Codes 1 Pounds 12 Gallons 13 Quarts 15 Liquid Oz. 28 Dry Oz. 19 Actual Nutrients	How many acres was this applied to? Acres	How many times was it applied? Number
01			31	32	33	34	36	37	40	41
02			31	32	33	34	36	37	40	41
03			31	32	33	34	36	37	40	41
04			31	32	33	34	36	37	40	41
05			31	32	33	34	36	37	40	41
06			31	32	33	34	36	37	40	41
07			31	32	33	34	36	37	40	41
08			31	32	33	34	36	37	40	41
09			31	32	33	34	36	37	40	41
10			31	32	33	34	36	37	40	41
11			31	32	33	34	36	37	40	41
12			31	32	33	34	36	37	40	41
13			31	32	33	34	36	37	40	41
14			31	32	33	34	36	37	40	41
15			31	32	33	34	36	37	40	41
16			31	32	33	34	36	37	40	41
17			31	32	33	34	36	37	40	41

FERTILIZER APPLICATIONS

L I N E	1	2	3 N I T R O G E N	4 P H O S P H A T E	5 P O T A S H	6 S U L F U R	7 How much was applied per acre per application? [Leave this column blank if actual nutrients were reported.]	8 Unit Codes 1 Pounds 12 Gallons 13 Quarts 15 Liquid Oz. 28 Dry Oz. 19 Actual Nutrients	9 How many acres was this applied to?	10 How many times was it applied?
	Crop	Crop Code	N	P ₂ O ₅	K ₂ O	S			Acres	Number
18			31	32	33	34	36	37	40	41
19			31	32	33	34	36	37	40	41
20			31	32	33	34	36	37	40	41
21			31	32	33	34	36	37	40	41
22			31	32	33	34	36	37	40	41
23			31	32	33	34	36	37	40	41
24			31	32	33	34	36	37	40	41
25			31	32	33	34	36	37	40	41
26			31	32	33	34	36	37	40	41
27			31	32	33	34	36	37	40	41
28			31	32	33	34	36	37	40	41
29			31	32	33	34	36	37	40	41
30			31	32	33	34	36	37	40	41
31			31	32	33	34	36	37	40	41
32			31	32	33	34	36	37	40	41
33			31	32	33	34	36	37	40	41
34			31	32	33	34	36	37	40	41
35			31	32	33	34	36	37	40	41
36			31	32	33	34	36	37	40	41
37			31	32	33	34	36	37	40	41
38			31	32	33	34	36	37	40	41
39			31	32	33	34	36	37	40	41
40			31	32	33	34	36	37	40	41

COMPLETION CODE FOR
FERTILIZER APPLICATIONS1 Incomp/R
3 Valid Zero

200

[Enumerator Action: If pesticides were reported in Section B, column 5, continue. Otherwise, go to Section E.]

1. Now I need to get complete information on all of the chemicals applied, including applications made by you and/or by custom applicators during the 2024 crop year to each of the target vegetable crops you grew. Let's start with the first application to your crop since the 2023 crop year harvest.

INCLUDE all chemical applications to the target vegetable crops. Use supplemental tables if necessary.

INCLUDE herbicides, insecticides, nematocides, miticides, fungicides, chemical thinners, growth regulators, microbial agents, pheromones, rodenticides, and soil fumigants.

EXCLUDE seed treatments, foliar applications of nutrients, and applications made to vegetables after harvest.

Office Use Lines in Table	Table 001	399
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Chemical Product Name	L I N E	1 Crop	2 Crop Code	3 What products were applied to the [crop]? [Enter product code.]	4 Was this product bought in liquid or dry form? [Enter L or D.]	5 Was this part of a tank mix? [If tank mix, enter line number of first product in mix.]
	01			61		63
	02			61		63
	03			61		63
	04			61		63
	05			61		63
	06			61		63
	07			61		63
	08			61		63
	09			61		63
	10			61		63
	11			61		63
	12			61		63
	13			61		63
	14			61		63
	15			61		63

[For pesticides not listed in Respondent Booklet, specify--]

Line No.	Pesticide Type (Herbicide, insecticide, fungicide, etc.)	Trade Name and Formulation	Form Purchased (Liquid or Dry)	EPA Reg. No.

Codes for Column 8

1 Pounds	30 Grams
12 Gallons	40 Kilograms
13 Quarts	41 Liters
14 Pints	46 Spirals
15 Ounces, Liquid	47 Packets
28 Ounces, Dry	50 Other (Specify:_____)

L I N E	6	OR	7	8	9	10
	How much was applied per acre per application?		What was the total amount applied per application?	[Enter unit code from above.] Code	How many acres were treated with this product? Acres	How many times was this product applied? Number
01	65 _____		73 _____	74	77 _____	79
02	65 _____		73 _____	74	77 _____	79
03	65 _____		73 _____	74	77 _____	79
04	65 _____		73 _____	74	77 _____	79
05	65 _____		73 _____	74	77 _____	79
06	65 _____		73 _____	74	77 _____	79
07	65 _____		73 _____	74	77 _____	79
08	65 _____		73 _____	74	77 _____	79
09	65 _____		73 _____	74	77 _____	79
10	65 _____		73 _____	74	77 _____	79
11	65 _____		73 _____	74	77 _____	79
12	65 _____		73 _____	74	77 _____	79
13	65 _____		73 _____	74	77 _____	79
14	65 _____		73 _____	74	77 _____	79
15	65 _____		73 _____	74	77 _____	79

[For pesticides not listed in Respondent Booklet, specify--]

Line No.	Pesticide Type (Herbicide, insecticide, fungicide, etc.)	Trade Name and Formulation	Form Purchased (Liquid or Dry)	EPA Reg. No.
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Chemical Product Name	L I N E	1 Crop	2 Crop Code	3 What products were applied to the [crop]? [Enter product code.]	4 Was this product bought in liquid or dry form? [Enter L or D.]	5 Was this part of a tank mix? [If tank mix, enter line number of first product in mix.]
	16			61		63
	17			61		63
	18			61		63
	19			61		63
	20			61		63
	21			61		63
	22			61		63
	23			61		63
	24			61		63
	25			61		63
	26			61		63
	27			61		63
	28			61		63
	29			61		63
	30			61		63
	31			61		63
	32			61		63
	33			61		63

[For pesticides not listed in Respondent Booklet, specify--]

Line No.

Pesticide Type
(Herbicide, insecticide, fungicide, etc.)Trade Name
and FormulationForm Purchased
(Liquid or Dry)

EPA Reg. No.

PESTICIDE APPLICATIONS

Codes for Column 8

1 Pounds	30 Grams
12 Gallons	40 Kilograms
13 Quarts	41 Liters
14 Pints	46 Spirals
15 Ounces, Liquid	47 Packets
28 Ounces, Dry	50 Other

L I N E	6	OR	7	8	9	11
	How much was applied per acre per application?		What was the total amount applied per application?	[Enter unit code from above.] Code	How many acres were treated with this product? Acres	How many times was this product applied? Number
16	65		73	74	77	79
17	65		73	74	77	79
18	65		73	74	77	79
19	65		73	74	77	79
20	65		73	74	77	79
21	65		73	74	77	79
22	65		73	74	77	79
23	65		73	74	77	79
24	65		73	74	77	79
25	65		73	74	77	79
26	65		73	74	77	79
27	65		73	74	77	79
28	65		73	74	77	79
29	65		73	74	77	79
30	65		73	74	77	79
31	65		73	74	77	79
32	65		73	74	77	79
33	65		73	74	77	79

COMPLETION CODE
for PESTICIDE
APPLICATIONS

1 Incomp/R	300
3 Valid Zero	

[For pesticides not listed in Respondent Booklet, specify--]

Line No.	Pesticide Type (Herbicide, insecticide, fungicide, etc.)	Trade Name and Formulation	Form Purchased (Liquid or Dry)	EPA Reg. No.
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

PEST MANAGEMENT PRACTICES

Now I have some questions about pest management practices you may have used on any of the total vegetable acres on this operation. INCLUDE both target and non-target vegetable crops grown. By pests, we mean insects, weeds, and diseases.

[Enumerator Action: Were pesticide applications reported in Section B, column 5 on page 6?]

☐ Yes – Continue

☐ No – Go to item 4

- | | |
|---|---|
| <p>1. Was weather data used to assist in determining either the need or when to make pesticide applications?.....</p> <p>2. Were any biological pesticides such as Bt (<i>Bacillus thuringiensis</i>), insect growth regulators, such as Courier, Intrepid, etc., neem or other natural/biological based products sprayed or applied to manage pests?.....</p> <p>3. Were pesticides with different mechanisms of action rotated or tank mixed for the primary purpose of keeping pests from becoming resistant to pesticides?.....</p> | <p style="text-align: center;">Code</p> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">600</div> <p>Yes=1
No=3</p> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">601</div> <p>Yes=1
No=3</p> <div style="border: 1px solid black; padding: 2px;">602</div> <p>Yes=1
No=3</p> |
|---|---|

4. In 2024, how were your vegetable acres primarily scouted for insects, weeds, diseases, and/or beneficial organisms?.....

- 1 By deliberately going to the vegetable acres specifically for scouting activities. Enter code 1 and go to item 5.
- 2 By conducting general observations while performing routine tasks. Enter code 2 and go to item 7.
- 3 The vegetable acres were not scouted. Enter code 3 and go to item 10.

Code

608

.....

5. Was an established scouting process used such as systemic sampling, recording counts, insect traps, etc., on any vegetable acres?.....

Code

609

Yes=1
No=3

6. Was scouting for pests done on these vegetable acres due to —

a. a pest advisory warning?.....

Code

610

Yes=1
No=3

b. a pest development model?.....

Code

611

Yes=1
No=3

1	2	3
		[If column 2 = Yes, ask—] Who did the majority of the scouting for [column 1]?
		1 Operator, partner or family member 2 An employee 3 Farm supply or chemical dealer 4 Independent crop consultant or commercial scout 5 Processor 6 Other: (specify: _____)
7. Were your vegetable acres scouted for —	Yes = 1 No = 3	Code
a. weeds?.....	612	614
b. insects or mites?.....	615	617
c. disease?.....	618	620

E PEST MANAGEMENT PRACTICES**E**

		Code
8. Were written or electronic records kept to track the activity or numbers of weeds, insects, or diseases?.....	Yes=1 No=3	623
9. Was scouting data compared to published information on infestation thresholds to determine when to take measures to manage pests?.....	Yes=1 No=3	624
10. Was field mapping data used for making pest management decisions?.....	Yes=1 No=3	625
11. Were the services of a diagnostic laboratory used for pest identification or soil or plant tissue pest analysis?.....	Yes=1 No=3	626
12. Were crop residues plowed down or removed to manage pests?.....	Yes=1 No=3	627
13. Were crops rotated during the past three years for the purpose of managing pests?.....	Yes=1 No=3	628
14. Were ground covers, mulches, or other physical barriers maintained to manage pest problems?...	Yes=1 No=3	629
15. Was a crop variety chosen because it had resistance to a specific pest?.....	Yes=1 No=3	630
16. Was no-till or minimum till used to manage pests?.....	Yes=1 No=3	631
17. Were planting locations planned to avoid infestation of pests?.....	Yes=1 No=3	632
18. Were planting or harvesting dates adjusted to manage pests?.....	Yes=1 No=3	633
19. Were row spacing or plant density adjusted to manage pests?.....	Yes=1 No=3	634
20. Was a trap crop grown to help manage insects?.....	Yes=1 No=3	635
21. Were any beneficial organisms such as insects, nematodes, or fungi applied or released to manage pests?	Yes=1 No=3	636
22. Were floral lures, attractant repellants, pheromone traps, or other biological pest controls used on any vegetable acres?.....	Yes=1 No=3	637
23. Were any vegetable acres cultivated for weed control during the growing season?.....	Yes=1 No=3	640
24. Were field edges, lanes, ditches, roadways, or fence lines chopped, mowed, plowed, or burned to manage pests on any vegetable acres?.....	Yes=1 No=3	642
25. Were equipment and implements cleaned after completing field work to reduce the spread of pests?.....	Yes=1 No=3	643
26. Were any vegetable acres irrigated for the 2024 crop?.....	Yes=1 No=3	644
[If item 26 = Yes, ask —]		
a. Were water management practices, excluding chemigation, such as irrigation scheduling, controlled drainage, or treatment of retention water used to manage pests?.....	Yes=1 No=3	645

COMPLETION CODE for PEST
MANAGEMENT PRACTICES

1 Incomp/R

500

CONCLUSION

1. **Survey Results:** To receive the complete results of this survey on the release date, go to nass.usda.gov/results

To have a brief summary emailed to you, please enter your email address:

1095

[Thank the respondent, then review this questionnaire.]

Ending time [Military].....

H H M M

0005

Office Use
Time in Hours

006

Record Use

[Did respondent use operation records to report —]

Code

Fertilizer data.....

Yes=1
No=3

026

Pesticide data.....

Yes=1
No=3

064

Supplement Use

[Record the total number of supplements used to complete this interview.]

Number

Fertilizer Supplements.....

067

Pesticide Supplements.....

068

Contact Information

Operation Email: (if different from above)

Operation Phone:

9937

9936

() - _____

check if
cell phone
☐

Respondent Name:

Respondent Phone: (if different from above)

9912

9911

() - _____

check if
cell phone
☐

9910 MM DD YYYY

Date: ____

OFFICE USE									
R. Unit	Ptr 1 Str	Ptr 2 Str	Ptr 3 Str	Ptr 4 Str	OPS	SSO 1	ADJ	Optional Use	
9921	9922	9923	9927	9928	923	9907	922	9906	9916
Response		Respondent		Mode		Enum.	POID		
1-Comp 2-R 3-Inac 4-Office Hold		9901	1-Op/Mgr 2-Spouse 3-Acct/Bkpr 4-Partner 9-Other	9902	2-PATI (tel) 3-PAPI (Face-to-Face)	9903	9998	9989	
								9900	9985
								Eval.	Change