

2013 VEGETABLE CHEMICAL USE SURVEY

OMB No. 0535-0218
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**NATIONAL
 AGRICULTURAL
 STATISTICS
 SERVICE**

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Pesticide Education Program

VERSION	POID	SUBTRACT
01	_____	_____

Pennsylvania Enterprise

CONTACT RECORD

DATE	TIME	NOTES

INTRODUCTION:

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

We are collecting information on costs and returns and need your help to make the information as accurate as possible. Authority for collection of information on the Costs and Returns Report is Title 7, Section 2204 of the U.S. Code. Under Title 7 of the U.S. Code and CIPSEA (Public Law 107-347), facts about your operation are kept confidential and used only for statistical purposes. Response is **voluntary**. You may skip any question(s) you prefer not to answer.

After removing your name, address, phone number and county information, the computerized data from the 2010 Vegetable Chemical Use Survey is made available to analysts in Penn State's Pesticide Education Program. This will allow the staff to analyze Pennsylvania pest management practices and pesticide usage in more detail than is available at the federal level alone. The statewide averages from Penn State are available at 222.pested.psu.edu/infocenter/PAPestManagementSurveys.html.

Penn State is committed to affirmative action, equal opportunity, and diversity of its work force.

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

004

BEGINNING TIME [MILITARY].

Name _____

Address _____

Phone (____) _____

[Name, address and partners verified and updated if necessary.]

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 for this information collection is 0535-0218. The time required to complete this information collection is estimated to average 45 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.

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".

CHANGE IN OPERATING 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?

NO - [Go to Enumerator Note below.]

YES - [Enter code 1, complete name and address information below for new operator, and read Enumerator Note.]

CODE

023

Operation Name _____ Operator Name _____ Address _____ _____ Phone (_____) _____
--

[ENUMERATOR NOTE: If the operation on the face page was in business part of the 2013 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?

Yes - [Go to "Conclusion".]

No - [Continue.]

SCREENING

1. Did this operation have any of the target crops during the 2013 crop year?

YES - [Continue.]

NO - [Write notes explaining situation then go to "Conclusion" on back page.]

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

one individual? [Go to Section A.]

a hired manager? [Go to Section A.]

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.]

PARTNERS POID _____	PARTNERS POID _____
PARTNER NAME	PARTNER NAME
ADDRESS	ADDRESS
CITY STATE ZIP PHONE NUMBER	CITY STATE ZIP PHONE NUMBER
PARTNERS POID _____	PARTNERS POID _____
PARTNER NAME	PARTNER NAME
ADDRESS	ADDRESS
CITY STATE ZIP PHONE NUMBER	CITY STATE ZIP PHONE NUMBER

A

LAND OPERATED

A

ACRES OPERATED

CODE

[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, pasture land, wasteland, and government program land?

YES - [Continue.] 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, including 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 . ____

B

VEGETABLE ACREAGE

B

1. What **target vegetables** were on these [Section A, item 2] acres during the 2013 crop year? (**Exclude** new plantings of vegetables not intended for harvest in 2013.)

[ENUMERATOR NOTE: If no target acreage is present, write notes and skip to "Conclusion" on back page.]

OFFICE USE LINES IN TABLE	TABLE 001	LINE 99	199
------------------------------	--------------	------------	-----

L I N E	1	2	3	4	5
	CROP	CROP CODE	How many acres were PLANTED for harvest in the 2013 crop year? (Include 2013 acres which were planted in other years.) ACRES	Were any commercial fertilizers applied to this crop? [YES = 1]	Were any herbicides, insecticides, fungicides, etc. applied to this crop? [YES = 1]
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 bearing acreage of TARGET CROPS for roadside stands, farmer's markets or U-pick sales.
 - Acreage not harvested due to weather, economic or other reasons.
 - Crops planted in the fall of 2012 if they were part of the 2013 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 2013.
 - New plantings and other plantings which are not yet bearing (asparagus & strawberries)
 - 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.

PENNSYLVANIA – CROP CODES	
BEANS, SNAP	
903	PROCESSING
CORN, SWEET	
818	FRESH MARKET
738	PUMPKINS

NOTES: _____

NOTES and CALCULATIONS:

FERTILIZER APPLICATIONS

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 2013 crop year. Include all applications regardless of how they were applied (*irrigation water, foliar applications, etc.*). [Record amount of 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	LINE 99	299
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LINE	1	2	3	4	5	6	7	8	9	10
	CROP	CROP CODE	NITROGEN N	PHOSPHATE P ₂ O ₅	POTASH K ₂ O	SULFUR S	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

C

FERTILIZER APPLICATIONS

C

LINE	1	2	3	4	5	6	7	8	9	10
	CROP	CROP CODE	NITROGEN N	PHOSPHATE P ₂ O ₅	POTASH K ₂ O	SULFUR S	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
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 .	401
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

NOTES and CALCULATIONS:

D PESTICIDE APPLICATIONS

D

[ENUMERATOR ACTION: If pesticides were reported in Section B, column 5, continue. Otherwise, skip 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 2013 crop year to each of the **target vegetable crops** you grew. **Let's start with the first application to your [crop] since the 2012 crop year harvest.**

[Complete the table for 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	LINE 99	399
------------------------------	--------------	------------	-----

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	62	63
	02			61	62	63
	03			61	62	63
	04			61	62	63
	05			61	62	63
	06			61	62	63
	07			61	62	63
	08			61	62	63
	09			61	62	63
	10			61	62	63
	11			61	62	63
	12			61	62	63
	13			61	62	63
	14			61	62	63
	15			61	62	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.
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

PESTICIDE APPLICATIONS

CODES FOR COLUMN 8

1 POUNDS	14 PINTS	30 GRAMS	46 SPIRALS
12 GALLONS	15 OUNCES, LIQUID	40 KILOGRAMS	47 PACKETS
13 QUARTS	28 OUNCES, DRY	41 LITERS	50 OTHER (<i>Specify _____</i>)

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 it 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 <i>(Herbicide, Insecticide, Fungicide, etc.)</i>	Tradename and Formulation	Form Purchased <i>(Liquid or Dry)</i>	EPA Reg. No.
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

D

PESTICIDE APPLICATIONS

D

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	62	63
	17			61	62	63
	18			61	62	63
	19			61	62	63
	20			61	62	63
	21			61	62	63
	22			61	62	63
	23			61	62	63
	24			61	62	63
	25			61	62	63
	26			61	62	63
	27			61	62	63
	28			61	62	63
	29			61	62	63
	30			61	62	63
	31			61	62	63
	32			61	62	63
	33			61	62	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.
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

D

PESTICIDE APPLICATIONS

D

CODES FOR COLUMN 8

1 POUNDS	14 PINTS	30 GRAMS	46 SPIRALS
12 GALLONS	15 OUNCES, LIQUID	40 KILOGRAMS	47 PACKETS
13 QUARTS	28 OUNCES, DRY	41 LITERS	50 OTHER (<i>Specify</i> _____)

LINE	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 it 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

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

Line No.	Pesticide Type (Herbicides, Insecticides, Fungicides, etc.)	Trade name and Formulation	Form Purchased (Liquid or Dry)	EPA Reg. No.
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

E PEST MANAGEMENT PRACTICES E

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.

1. [Enumerator Action: **Were PESTICIDE APPLICATIONS reported in Section B, column 5 on page 5?**]

- YES** - [Continue.] **No** - [Go to item 5.]

2. Was weather data used to assist in determining either the need or when to make pesticide applications? **YES = 1**

CODE
600

3. Were any biological pesticides such as Bt (*Bacillus thuringiensis*), insect growth regulators (*Courier, intrepid, etc.*), neem or other natural/biological based products sprayed or applied to manage pests? **YES = 1**

601

4. Were pesticides with different mechanisms of action rotated or tank mixed for the primary purpose of keeping pests from becoming resistant to pesticides? **YES = 1**

602

5. In 2013, 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 6.)*
- 2 By conducting general observations while performing routine tasks. *(Enter code 2 and go to item 8.)*
- 3 The vegetable acres were not scouted. *(Enter code 3 and go to item 11.)*

.....

608

6. Was an established scouting process used (*systemic sampling, recording counts, insect traps, etc.*) on any vegetable acres? **YES = 1**

609

7. Was scouting for pests done on these vegetable acres due to---

- a. a pest advisory warning? **YES = 1**

610

- b. a pest development model? **YES = 1**

611

1		2 [If column 1 is YES , ask---] Who did the majority of the scouting for [column 1]—
8. Were your vegetable acres scouted for ---	YES = 1	CODE
a. weeds?	612	614
b. insects and mites?	615	617
c. disease?	618	620

- 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: _____*)

E PEST MANAGEMENT PRACTICES

E

		CODE
9.	Were written or electronic records kept to track the activity or numbers of weeds, insects or diseases?	623
	YES = 1	
10.	Was scouting data compared to published information on infestation thresholds to determine when to take measures to manage pests?	624
	YES = 1	
11.	Was field mapping data used for making pest management decisions?	625
	YES = 1	
12.	Were the services of a diagnostic laboratory used for pest identification or soil or plant tissue pest analysis?	626
	YES = 1	
13.	Were crop residues plowed down or removed to manage pests?	627
	YES = 1	
14.	Were crops rotated during the past three years for the purpose of managing pests?	628
	YES = 1	
15.	Were ground covers, mulches, or other physical barriers maintained to manage pest problems?	629
	YES = 1	
16.	Was a crop variety chosen because it had resistance to a specific pest?	630
	YES = 1	
17.	Was no-till or minimum till used to manage pests?	631
	YES = 1	
18.	Were planting locations planned to avoid infestation of pests?	632
	YES = 1	
19.	Were planting or harvesting dates adjusted to manage pests?	633
	YES = 1	
20.	Were row spacing or plant density adjusted to manage pests?	634
	YES = 1	
21.	Was a trap crop grown to help manage insects?	635
	YES = 1	
22.	Were any beneficial organisms (<i>insects, nematodes, fungi</i>) applied or released to manage pests?	636
	YES = 1	
23.	Were floral lures, attractants, repellants, pheromone traps or other biological pest controls used on any vegetable acres?	637
	YES = 1	
24.	Were any vegetable acres cultivated for weed control during the growing season?	640
	YES = 1	
25.	Were field edges, lanes, ditches, roadways or fence lines chopped, mowed, plowed, or burned to manage pests on any vegetable acres?	642
	YES = 1	
26.	Were equipment and implements cleaned after completing field work to reduce the spread of pests?	643
	YES = 1	
27.	Were any vegetable acres irrigated for the 2013 crops?	644
	YES = 1	
a.	[If item 27 = YES, ask--] Were water management practices (excluding chemigation) such as irrigation scheduling, controlled drainage, or treatment of retention water used to manage pests?	645
	YES = 1	

COMPLETION CODE for FERTILIZER APPLICATIONS	
1 Incomp/R	200
3 Valid Zero	

COMPLETION CODE for PESTICIDE APPLICATIONS	
1 Incomp/R	300
3 Valid Zero	

COMPLETION CODE for PEST MANAGEMENT PRACTICES	
1 Incomp/R	500

CONCLUSION

SURVEY RESULTS

1. To receive the complete results of this survey on the release date, go to www.nass.usda.gov/results/. Would you rather have a brief summary mailed to you at a later date? **YES = 1**

CODE

099

[Thank the respondent, then review this questionnaire.]

ENDING TIME [MILITARY].....

005

**OFFICE USE
TIME IN HOURS**

006

RECORD USE

Did respondent use operation records to report pesticide data? **YES = 1**

CODE

064

SUPPLEMENT USE

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

NUMBER

Fertilizer Supplements.....

067

Pesticide Supplements.....

068

Reported by: _____							9911 Telephone No. (____) _____				
Response		Respondent		Mode		Enum	Eval	Date MM DD YY	R Unit	Duplication Adjustor	Optional
1-Comp	9901	1- Op/Mgr	9902	2-Tel	9903	0098	0100	9910	0921	0922	0002
2-R		2-Sp		3-Face-to - Face					Office Use for POID		
3-Inac		3-Acct/Bkpr							0789		
4-Office Hold		4-Partner						13			
9-Other											
S/E Name _____											