2018 VEGETABLE CHEMICAL USE SURVEY

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				ENTERPRISE
VERSION 01		POID	SUBTRACT	
		CONT	ACT RECORD	
DATE	TIME	00117	NOTES	
We are collection you provide we any identified accordance we rederal laws. Response is a second to, a collection is collection is considerable to the rederal laws.	cting information will be used for some ble information with the Confide or For more info voluntary. We the Paperwork of information 1535-0218. The time for reviewing information information the property of the property in the for reviewing information 1535-0218.	statistical purposes only. Your restabout you or your operation is sultential Information Protection provisormation on how we protect your in encourage you to refer to your restance. Reduction Act of 1995, an agency of unless it displays a valid OMB content of the product of the complete this interest.	help to make the information sponses will be kept confident bject to a jail term, a fine, or besions of Title V, Subtitle A, Puriformation please visit:	

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 char	nge in operation name or operator	?	
		1, complete name and address int	ormation below for new operator,	CODE 023
			Operation Name Operator Name Address Phone ()	
[EN	IUMERATOR NOTE:	questionnaire for the part of the y operation has been taken over by	was in business part of the 2018 crop year, co year during which the operation did business, u y a new operator. If the operator has changed sh with the new operator after reading "Valid S Manual.]	ınless the ' midyear, please
2.	Has the operation prin ☐ Yes - [Go to "Conci ☐ No - [Continue.]	•	mbined or merged with any other farming oper	ations?

SCREENING

1.	Did this operation have any of the target crops during the 2018 crop year?	
	☐ YES - [Continue.]	
	□ NO - [Write notes explaining situation then go to "Conclusion" on back page.]	
	Notes	
2.	Are the day-to-day decisions for this operation (<i>name on label</i>) made by – [Check one.]	
	one individual? [Go to Section A.]	
	a hired manager? [Go to Section A.]	
	partners? [Continue with questions 3 and 4.]	
3.	[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.]	NUMBER
	(Partners jointly operate land and share in decision making. Do not include landlords and tenants as partners.)	
4	Places identify the other percents) in this partnership, then go to Section A	

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		
PARTNERS PARTNER NAME	POID			PARTNERS PARTNER NAME	POID		
-	POID				POID		

A LAND OPERATED A

AC	RES	S OPERATED	
[Er	num	erator 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
No	wlv	would like to ask about the total acres operated under this land arrangement.	
1.	Но	w 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
		(Exclude land used on an animal unit month (Aow) basis.).	
		Rent to others?	905
	C.	Rent to others?	•
2.	[Ca	alculate 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.]	
Th	e re	maining questions in this survey refer to these [item 2] acres.	
3.	Of	the total acres operated, how many acres are considered cropland, including	
	lan	d in hay, summer fallow, cropland idle, cropland used for pasture and cropland government programs?	802
4.		the total acres operated, how many acres are vegetables?	803
	(Inc	clude both target and non-target vegetables planted on the operation.)	·

TARGET CROPS & CODES

FLORIDA
613 BEANS, SNAP
808 CABBAGE
766 CORN, SWEET
798 CUCUMBERS
736 PEPPERS, BELL
742 SQUASH
748 STRAWBERRIES
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
738 PUMPKINS
742 SQUASH

MINNESOTA	
766 CORN, SWEET	
855 PEAS, GREEN	

NEW JERSEY
736 PEPPERS, BELL
742 SQUASH

NEW YOR	RK
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	

ОНЮ
736 PEPPERS, BELL
738 PUMPKINS

OREGON
613 BEANS, SNAP
766 CORN, SWEET
824 ONIONS
855 PEAS, GREEN
742 SQUASH

PENNSYLVANIA 613 BEANS, SNAP 738 PUMPKINS

SOUTH CAROLINA 752 WATERMELONS

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	

NOTES:

 What target vegetables were on these [Section A, item 2] acres during the 2018 crop year? (Exclude new plantings of vegetables not intended for harvest in 2018.)

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

OFFICE USE LINES IN TABLE	TABLE 001	199
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	1	2	3	4	5
LINE	L I N		How many acres were PLANTED for harvest in the 2018 crop year? (Include 2018 acres which were planted in other years.)	Were any commercial fertilizers applied to this crop?	Were any herbicides, insecticides fungicides, etc. applied to this crop?
	CROP	CROP CODE	ACRES	[YES = 1]	[YES = 1]
01			·	12	13
02			11	12	13
03				12	13
04			11	12	13
05			11	12	13
06			11	12	13
07			11 ·	12	13
08				12	13
09			11 ·	12	13
10			11 ·	12	13
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 2017 if they were part of the 2018 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 2018. • 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.

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.

 I need to record complete information on all commercial fertilizers applied to the target vegetables grown during the 2018 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 TABL	
-----------------	--

	1	2	3	4	5	6	7	8	9	10
LINE		CROP	N I T R O G E N	P H O S P H A T E	P O T A S H	S U F U R	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?	How many times was it applied?
	CROP	CODE	N	P ₂ 0 ₅	K ₂ 0	S			ACRES	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

	1	2	3	4	5	6	7	8	9	10
LIZE		CROP	N I T R O G E N	P H O S P H A T E	P O T A S H	S U L F U R	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?	How many times was it applied?
	CROP	CODE	N	P₂0₅	K₂0	S	36	37	ACRES 40	NUMBER 41
18		i.					•	-	•	
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

NOTES

[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 2018 crop year to each of the target VEGETABLE crops you grew. Let's start with the first application to your [crop] since the 2017 crop year harvest.

[Complete the table for all chemical applications to the target VEGETABLE crops. Use supplemental tables if necessary.]
(Include herbicides, insecticides, nematicides, miticides, fungicides, chemical thinners, growth regulators, microbial agents, pheromones, rodenticides, and soil fumigants. Exclude seed treatments, foliar applications of nutrients, and applications made to VEGETABLE after harvest.)

				OFFICE USE LINES IN TABLE	TABLE 001	99
CHEMICAL PRODUCT NAME	L I N E	1 CROP	2 CROP CODE	What products were applied to the [crop]?	4 Was this product bought in liquid or dry form?	Was this part of a tank mix? [If tank mix, enter line number of first product in mix.]
PRODUCT NAME		CROP	CODE	61	[Enter L or D.]	63
	01			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	disides and listed in D		61		63

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	14	PINTS	30	GRAMS	46	SPIRALS
12 GALLONS	15	OUNCES, LIQUID	40	KILOGRAMS	47	PACKETS
13 QUARTS	28	OUNCES, DRY	41	LITERS	50	OTHER (Specify)

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

Line No.	Pesticide Type (Herbicide, Insecticide, Fungicide, etc.)	Tradename and Formulation	Form Purchased (Liquid or Dry)	EPA Reg. No.

PESTICIDE APPLICATIONS

		1	2	3	4	5
	L I N E			What products were applied to the [crop]?	Was this product bought in liquid or dry form?	Was this part of a tank mix? [If tank mix, enter line number
CHEMICAL PRODUCT NAME		CROP	CROP CODE	[Enter product code.]	[Enter L or D.]	of first product in mix.]
	40			61	[=	63
	16			61		63
	17					
	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

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

D

CODES FOR COLUMN 8

1	1 POUNDS	14	PINTS	30	GRAMS	46	SPIRALS
12	2 GALLONS	15	OUNCES, LIQUID	40	KILOGRAMS	47	PACKETS
13	3 QUARTS	28	OUNCES, DRY	41	LITERS	50	OTHER (Specify)

	6 C	DR 7	8	9	10
L I N E	How much was applied per acre per application?	What was the total amount applied per application?	[Enter unit code from above.]	How many acres were treated with this product?	How many times was it applied?
			CODE	ACRES	NUMBER
16	65 ·	73	74		79
17	65	73	74		79
18	65	73	74		79
19	65	73	74		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		79
25	65	73	74	77 ·	79
26	65	73	74		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

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

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.

[Er	numerator Action: Were PESTICIDI	E APPLICATI	ONS reported in S	Section B, column 5 on page 51	?]		
	☐ YES - [Continue.]	☐ No - [Go	o to item 4.]				
					CODE		
1.	Was weather data used to assist in d when to make pesticide applications?			YES = 1	600		
2.	. Were any biological pesticides such as Bt (<i>Bacillus thuringiensis</i>), insect growth regulators (<i>Courier, intrepid, etc.</i>), neem or other natural/biological based products sprayed or applied to manage pests?						
3.	3. Were pesticides with different mechanisms of action rotated or tank mixed for the primary purpose of keeping pests from becoming resistant to pesticides?						
4.	In 2018, how were your vegetable acres primarily scouted for insects, weeds, diseases and/or	1 By deliberately for scouting ac 2 By conducting routine tasks. 3 The vegetable (Enter code 3	608				
5.	5. Was an established scouting process used (systemic sampling, recording counts, insect traps, etc.) on any vegetable acres?						
6.	Was scouting for pests done on thesa. 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]— 1 Operator, partner or family member 2 An employee 3 Farm supply or chemical dealer 4 Independent crop consultant or commercial scout					
7.	7. Were your vegetable acres scouted for YES = 1 5 Processor 6 Other (specify:						
	a. weeds?	CODE 614					
			615	617			
	b. insects and mites?		618	620			
	c. disease?						

PEST MANAGEMENT PRACTICES

F CODE Were written or electronic records kept to track the activity or 623 numbers of weeds, insects or diseases?..... **YES = 1** Was scouting data compared to published information on infestation 624 thresholds to determine when to take measures to manage pests?..... **YES = 1** 10. Was field mapping data used for making pest management decisions?..... **YES = 1** 11. Were the services of a diagnostic laboratory used for pest identification or 626 soil or plant tissue pest analysis?..... YES = 1627 12. Were crop residues plowed down or removed to manage pests?..... **YES = 1** 628 13. Were crops rotated during the past three years for the purpose of managing pests?..... **YES = 1** 14. Were ground covers, mulches, or other physical barriers 629 maintained to manage pest problems?..... **YES = 1** 630 15. Was a crop variety chosen because it had resistance to a specific pest?..... **YES = 1** 631 16. Was no-till or minimum till used to manage pests?..... **YES = 1** 632 17. Were planting locations planned to avoid infestation of pests?..... **YES = 1** 633 18. Were planting or harvesting dates adjusted to manage pests?..... **YES = 1** 634 19. Were row spacing or plant density adjusted to manage pests?..... **YES = 1** 635 20. Was a trap crop grown to help manage insects?..... YES = 121. Were any beneficial organisms (insects, nematodes, fungi) 636 applied or released to manage pests?..... YES = 122. Were floral lures, attractants, repellants, pheromone traps or 637 other biological pest controls used on any vegetable acres?..... **YES = 1** 640 23. Were any vegetable acres cultivated for weed control during the growing season?..... YES = 124. Were field edges, lanes, ditches, roadways or fence lines chopped, 642 mowed, plowed, or burned to manage pests on any vegetable acres?..... **YES** = 1 25. Were equipment and implements cleaned after completing 643 field work to reduce the spread of pests?..... **YES = 1** 644 26. Were any vegetable acres irrigated for the 2018 crops?..... YES = 1a. [If item 26 = YES, ask---] Were water management practices (excluding chemigation)

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

such as irrigation scheduling, controlled drainage, or treatment

of retention water used to manage pests?.....

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

COMPLETION CODE for PEST MANAGEMENT PRACTICES								
1 Incomp/R	500							

YES = 1

645

CONCLUSION

SURVEY RESULTS

1. To rece http://w	ive the comp ww.nass.uso	plete results of da.gov/Surveys	this survey on s/Guide_to_NA	the	release _Surveys	date, go to s/					
To have please e	a brief sumr nter your em	mary emailed to nail address.	o you at a latei	r dat	e,	1095					
										_	2005
										9990	CODE
Would y	ou rather ha	ve a brief sumi	mary mailed to	you	at a late	er date?			YES =		
[Thank the respondent, then review this questionnaire.]											
ENDING TIME [MILITARY].										005	
											ICE USE IN HOURS
											•
RECORD U	SE									(CODE
Did resp	ondent use	operation reco	rds to report pe	estic	ide data	?			YES =	064 1	
SUPPLEME											
Record t	he total num	nber of supplen	nents used to	com	plete this	s interview.					JMBER
Fertilizer Supplements										. 067	
Pesticide Supplements										068	
					9910			9911			
Reported by: Telephone:											
				C	OFFICE US	SE					
R. Unit	Ptr 1 Str	Ptr 2 Str	Ptr 3 Str	Pt	tr 4 Str	OPS		SO 1	ADJ	Optional Use	
9921	9922	9923	9927	9928	3	923	9907		922	9906	9916

	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		
Res	ponse	Respo	ondent	Mod	Mode		POID				
1-Comp 2-R 3-Inac	9901 1-Op/Mgr 2-Sp 3-Acct/Bkpr		9902	2-PATI (tel) 3-PAPI (Face-to- Face)		9998	9989				
4-Office Hold		4-Partner 9-Other					Eval.		Change		
							9900	998	5		