2024 Vegetable Chemical Use Survey Presentations

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Introduction to the Vegetable Chemical Use Survey (VCUS)

Stephen Habets
Heartland Region

Videos

- Introduction & Purpose
- Face Page & Screening
- Section A: Land Operated
- Section B: Vegetable Acres
- Section D: Pesticide Applications
- Section E: Pest Management
- Conclusion
- AZ/CA Survey Differences

Background

- NASS began collecting agricultural pesticide and fertilizer use data in 1990 in response to the Water Quality Initiative passed by Congress.
- Along with NASS, several other USDA agencies collect and analyze agricultural chemical use and residue data.
  - The aggregation of these data form the basis of the USDA Pesticide Data Program (PDP)
- The Food Quality Protection Act (FQPA) which was implemented in 1996 and requires the EPA to conduct a review of tolerance levels for re-registration of pesticide products also relies on the USDA PDP.

Purpose

- To collect fertilizer usage, pesticide usage, and pest management practices from producers of targeted crops.
  - Evaluate water quality
  - Assess food safety
  - Study potential human exposure to pesticide residues
  - Review tolerance levels for re-registration of pesticide products

Why do we need the data?

- Growers can show how they manage chemical applications responsibly.
- To establish facts about chemical use and lessen concern relating to marketing and exports.
- Actual usage data used in the decision-making process for product registration, re-registration, and product alternatives.
- Answer questions about food supply & safety and water quality.

Data Users

- Growers
- News media
- Processors
- Foreign buyers
- Food and Drug Administration
- Agricultural Marketing Service
- Economic Research Service
- Environmental Protection Agency

Changes from 2022

- Section C: Fertilizer Applications removed
- Conclusion
  - Dropped item code
    - 1095 (To have a brief summary emailed to you, please enter your email address)
  - Added the following:
    - Item code 9929 (Operator Email)
    - Item code 9918 (Operator Phone)
    - Item codes 9917 and 9920 (Check to receive the results by email)

Changes from 2022

- **Target commodities changed for some states**

- New Jersey
  - + Asparagus
- Texas
  - - Pumpkins
- Washington
  - - Asparagus
  - - Carrots

- California
  - - Asparagus
- Arizona
  - - Cantaloupes
- Wisconsin
  - - Carrots

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Vegetable Chemical Use Survey Face Page & Screening

Kate Jackson
Heartland Region

Face Page

Remember to read this statement to the target

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.

Follow the skip pattern

Change in Operator Status

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 *yyyy* 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

Substitution Rules

- **Substitution Allowed:**
  - The new operator can report <u>all</u> chemical data for the entire *yyyy* crop year.

    AND
  - The new operator did not merge or combine the operation on the label with any other target vegetable acres held previously.

- **Substitution NOT Allowed:**
  - The new operator had existing target vegetable acreage, and it is being combined with the newly acquired acreage under one operation.

Screening

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

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

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Section A - Land Operated

Joseph Cook
Heartland Region

Acreage Insert

- Each acreage insert will show:
  - The sampled unit's name, address, telephone number and ID information
  - The type of operation reported, and who reported the information
  - The total acres operated under the sampled unit's operating arrangement including the acres owned, acres rented from others, acres rented to others, total cropland acres, and total acres of all vegetable crops
  - Each target crop reported during Screening Phase enumeration, and each target crop acreage

Total Acres in Operating Arrangement

4

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.

Cropland Acreage

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 .___

Question 3

EXCLUDE:

- Pasture and rangeland that has never been tilled.
- Government program acres planted to trees. These acres are woodland.
- Woodland and wasteland.

Vegetable Acreage

4. Of the total acres operated, how many acres are vegetables? INCLUDE both target and non–target vegetables planted on the operation..... 803 .___

Question 4

INCLUDE:

- All bearing & non-bearing vegetable acres
- All target and non-target vegetable acres
- Acreage planted in strawberries
- Crops planted in the Fall of 2023, if they were part of the 2024 crop year

EXCLUDE:

- Acreage planted as a home garden
- Vegetable acres grown in another State
- Vegetable acres grown for seed or commercial transplanting
- Vegetables grown in greenhouses and hothouses
- All mushrooms, potatoes, sweet potatoes, and dry beans

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Section B – Vegetable Acreage

Kenzie Taylor
Southern Plains Region

Outline

- Inclusion and Exclusion Criteria for Vegetable acreage
- Target Crop and their respective commodity codes
- What to include in Section B and how enumerators & supervisors should respond
- California's version of Section B
- Example Exercise

Inclusion Criteria for Section B

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.
- Crops planted in the fall of 2023 if they were part of the 2024 crop.
- Double cropping

Exclusion Criteria for Section B

- 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.

Target Crop & Codes

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

MINNESOTA	
766	Corn, Sweet
855	Peas, Green

NEW JERSEY	
701	Asparagus
736	Peppers, Bell
742	Squash

PENNSYLVANIA	
613	Beans, Snap
738	Pumpkins

TEXAS	
808	Cabbage
798	Cucumbers
824	Onions
752	Watermelons

Target Crop & Code

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

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

WASHINGTON	
766	Corn, Sweet
824	Onions
855	Peas, Green

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

Target Crop & Code

INDIANA	
738	Pumpkins
752	Watermelons

MICHIGAN	
701	Asparagus
613	Beans, Snap
798	Cucumbers
742	Squash

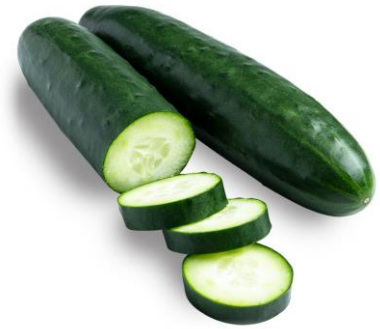
OHIO	
738	Pumpkins

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

B VEGETABLE ACREAGE

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.

LINE	1 Crop	2 Crop Code	3 How many acres were planted for harvest in the 2024 crop year? (INCLUDE 2024 acres which were planted in other years.) Acres	4 Were any herbicides, insecticides, fungicides, etc. applied to this crop? Yes = 1 No = 3
01			11 .___	13
02			11 .___	13
03			11 .___	13



Here's an Example!

- In 2024, a farmer from Wisconsin grew and harvested cabbage, cucumbers and sweet corn on their 200-acre property during 2024. There were 20 acres of cabbage, 35 acres of cucumbers, & 45 acres of sweet corn planted for harvest during this past year. There were no pesticides applied for cabbage and sweet corn. However, pesticides were applied for the cucumbers.
- How would you fill out Section B of this questionnaire?

B VEGETABLE ACREAGE

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.

LINE	1 Crop	2 Crop Code	3 How many acres were planted for harvest in the 2024 crop year? (INCLUDE 2024 acres which were planted in other years.) Acres	4 Were any herbicides, insecticides, fungicides, etc. applied to this crop? Yes = 1 No = 3
01	Cabbage	808	11 20.0	13 3
02	Cucumbers	798	11 35.0	13 1
03	Sweet Corn	766	11 45.0	13 3

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

California's Version of Section B

California - Pacific Region

2024 Vegetable Chem Use Survey

California Crop Codes

613	Beans, Snap	714	Cauliflower	730	Honeydew	738	Pumpkins
705	Broccoli	715	Celery	725	Lettuce, Head	759	Spinach
808	Cabbage	766	Corn, Sweet	728	Lettuce, Other	742	Squash
709	Cantaloupes	798	Cucumbers	824	Onions	770	Tomatoes
632	Carrots	723	Garlic	736	Peppers, Bell	752	Watermelons

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.

LINE	1 Crop	2 Crop Code	3 How many acres of [crop] did this operation have? Acres	4 Were any herbicides, insecticides, fungicides, etc. applied to this crop? Yes = 1 No = 3	5 On what date did you complete harvest of your 2023 crop year [crop]? MM DD YY	6 On what date did you complete harvest of your 2024 crop year [crop]? MM DD YY
01			11 ▪___	13	14	15
02			11 ▪___	13	14	15
03			11 ▪___	13	14	15
04			11 ▪___	13	14	15

LINE	CAL - EPA SITE LOCATION NUMBER (if required)					
01						
02						
03						
04						

Now…another example

Here's another example!

- In 2024, a California farmer grew and harvested watermelon, cantaloupes, and honeydew on their 200-acre property during 2024. There were 60 acres of watermelon, 69 acres of cantaloupes, & 71 acres of honeydew planted for harvest during this past year. There were no pesticides applied for watermelon and cantaloupes. However, pesticides were applied for the honeydew.
- The 2023 completed harvest: 08/16/23
- The 2024 completed harvest: 7/29/24
- How would you fill out Section B of this questionnaire?

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.

LINE	1 Crop	2 Crop Code	3 How many acres of [crop] did this operation have? Acres	4 Were any herbicides, insecticides, fungicides, etc. applied to this crop? Yes = 1 No = 3	5 On what date did you complete harvest of your 2023 crop year [crop]? MM DD YY	6 On what date did you complete harvest of your 2024 crop year [crop]? MM DD YY
01	Watermelon	752	11 60.0	13 3	14 08/16/23	15 07/29/24
02	Cantaloupes	709	11 69.0	13 3	14 08/16/23	15 07/29/24
03	Honeydew	730	11 71.0	13 1	14 08/16/23	15 07/29/24
04			11 .	13	14	15

Thank you for your time!

Our big takeaways:

- Follow your skip codes- especially in the tables
- Be familiar with the terms and questionnaire before you start calling
- Please take good notes

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Section D – Pesticide Applications

Kenzie Taylor
Southern Plains Region

Section D – Pesticide Applications

The purpose of this section is to record all pesticides used on the target vegetable crops for crop year 2024.

Section D – Pesticide Applications

Include:

- All applications to target crops after the 2023 harvest through the 2024 crop year.
- Custom applications
- Spot Treatments and partial field applications
- Applications made by aircraft
- Herbicides, Insecticides, Nematicides, Miticides, Fungicides, Chemical Thinners, Growth Regulators, Microbial Agents, Pheromones, Rodenticides, and Soil Fumigants
- Biological and Botanical Pesticides, such as *Bacillus Thuringiensis* (BT)

Section D – Pesticide Applications

Exclude:

- Fertilizers (anything with an N-P-K-S analysis) and manure
- Adjuvants and surfactants (wetting agents and spreaders)
- Seed Treatments
- Applications to fences, canals, ditch banks, and ponds.

Pesticide Table

Chemical Product Name	LINE	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

LINE	6 How much was applied per acre per application?	OR 7 What was the total amount applied per application?	8 [Enter unit code from above.] Code	9 How many acres were treated with this product? Acres	10 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

Pesticide Table

Chemical Product Name	LINE	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.]
DIAZINON AG500	01			61		63
	02			61		63
	03			61		63

Pesticide Table

Chemical Product Name	LINE	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.]
DIAZINON AG500	01	Onions	624	61		63
	02			61		63
	03			61		63

Pesticide Table

D	I	11315	DIAZINON 50W	66222-10
L	I	11326	DIAZINON AG500	66222-9
L	I	10638	DIAZINON AG600	66222-103

Chemical Product Name	LINE	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.]
DIAZINON AG500	01	Onions	624	61 11326		63
	02			61		63
	03			61		63

Pesticide Table

D	I	11315	DIAZINON 50W	66222-10
L	I	11326	DIAZINON AG500	66222-9
L	I	10638	DIAZINON AG600	66222-103

Chemical Product Name	LINE	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.]
DIAZINON AG500	01	Onions	624	61 11326	L	63
	02			61		63
	03			61		63

Pesticide Table

Chemical Product Name	LINE	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.]
DIAZINON AG500	01	Onions	624	61 11326	L	63
	02			61		63
	03			61		63

Pesticide Table

Chemical Product Name	LINE	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.]
DIAZINON AG500	01	Onions	624	61 11326	L	63
	02			61		63
	03			61		63

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:_____)

LINE	6 How much was applied per acre per application? OR	7 What was the total amount applied per application?	8 [Enter unit code from above.] Code	9 How many acres were treated with this product? Acres	10 How many times was this product applied? Number
01	65 3 .0 0	73 .___ ___	74 13	77 .___	79
02	65 .___ ___	73 .___ ___	74	77 .___	79
03	65 .___ ___	73 .___ ___	74	77 .___	79

Pesticide Table

Chemical Product Name	LINE	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.]
DIAZINON AG500	01	Onions	624	61 11326	L	63
	02			61		63
	03			61		63

Codes for Column 8

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12 Gallons	40 Kilograms
13 Quarts	41 Liters
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15 Ounces, Liquid	47 Packets
28 Ounces, Dry	50 Other (Specify:_____)

LINE	6 How much was applied per acre per application? OR	7 What was the total amount applied per application?	8 [Enter unit code from above.] Code	9 How many acres were treated with this product? Acres	10 How many times was this product applied? Number
01	65 .___ ___	73 18.00	74 13	77 .___	79
02	65 .___ ___	73 .___ ___	74	77 .___	79
03	65 .___ ___	73 .___ ___	74	77 .___	79

Pesticide Table

Chemical Product Name	LINE	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.]
DIAZINON AG500	01	Onions	624	61 11326	L	63
	02			61		63
	03			61		63

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:_____)

LINE	6 How much was applied per acre per application?	OR	7 What was the total amount applied per application?	8 [Enter unit code from above.] Code	9 How many acres were treated with this product? Acres	10 How many times was this product applied? Number
01	65 3 .0 0		73 1 8 .0 0	74 13	77 .___	79
02	65 .___ ___		73 .___ ___	74	77 .___	79
03	65 .___ ___		73 .___ ___	74	77 .___	79

Pesticide Table

Chemical Product Name	LINE	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.]
DIAZINON AG500	01	Onions	624	61 11326	L	63
	02			61		63
	03			61		63

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:_____)

LINE	6 How much was applied per acre per application?	OR 7 What was the total amount applied per application?	8 [Enter unit code from above.] Code	9 How many acres were treated with this product? Acres	10 How many times was this product applied? Number
01	65 3.00	73 .___	74 13	77 6.0	79
02	65 .___	73 .___	74	77 .___	79
03	65 .___	73 .___	74	77 .___	79

Pesticide Table

Chemical Product Name	LINE	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.]
DIAZINON AG500	01	Onions	624	61 11326	L	63
	02			61		63
	03			61		63

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:_____)

LINE	6 How much was applied per acre per application?	OR	7 What was the total amount applied per application?	8 [Enter unit code from above.] Code	9 How many acres were treated with this product? Acres	10 How many times was this product applied? Number
01	65 3.00		73 .___ ___	74 13	77 6.0	79 1
02	65 .___ ___		73 .___ ___	74	77 .___	79
03	65 .___ ___		73 .___ ___	74	77 .___	79

Pesticide Table

- One application of Diazinon AG500, not mixed with other pesticides, sprayed across six acres of Onions at a rate of 3 quarts of product per acre.

Chemical Product Name	LINE	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.]
DIAZINON AG500	01	Onion	624	61 11326	L	63
	02			61		63
	03			61		63

LINE	6 OR 7 How much was applied per acre per application? / What was the total amount applied per application?	8 [Enter unit code from above.] Code	9 How many acres were treated with this product? Acres	10 How many times was this product applied? Number
01	65 3 .0 0 / 73 .__ __	74 13	77 6.0	79 1
02	65 .__ __ / 73 .__ __	74	77 .__	79
03	65 .__ __ / 73 .__ __	74	77 .__	79

Pesticide Table: Tank Mix

Chemical Product Name	LINE	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.]
DIAZINON AG500	01	Onion	624	61 11326	L	63
	02			61		63
	03			61		63

LINE	6 How much was applied per acre per application?	OR 7 What was the total amount applied per application?	8 [Enter unit code from above.] Code	9 How many acres were treated with this product? Acres	10 How many times was this product applied? Number
01	65 3 .0 0	73 .__ __	74 13	77 6.0	79 1
02	65 .__ __	73 .__ __	74	77 .__	79
03	65 .__ __	73 .__ __	74	77 .__	79

Pesticide Table: Tank Mix

L	I	11148	LAMBDA CY EC INSECTICIDE	70506-120
L	I	11404	LAMBDA SELECT	86869-5
L	I	11362	LAMBDA-CY AG	83222-42
L	I	11405	LAMBDA-CYHALOTHRIN 1 EC INSECTICIDE	228-708

Chemical Product Name	LINE	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.]
DIAZINON AG500	01	Onion	624	61 11326	L	63 1
LAMBDA-CY AG	02	Onion	624	61 11362	L	63 1
	03			61		63

LINE	6 How much was applied per acre per application?	OR 7 What was the total amount applied per application?	8 [Enter unit code from above.] Code	9 How many acres were treated with this product? Acres	10 How many times was this product applied? Number
01	65 3.00	73 .__ __	74 13	77 6.0	79 1
02	65 3.20	73 .__ __	74 15	77 6.0	79 1
03	65 .__ __	73 .__ __	74	77 .__	79

Pesticide Table: Tank Mix

Chemical Product Name	LINE	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.]
DIAZINON AG 500	01	Onion	624	61 11326	L	63 1
LAMBDA-CY AG	02	Onion	624	61 11362	L	63 1
	03			61		63

LINE	6 How much was applied per acre per application?	OR 7 What was the total amount applied per application?	8 [Enter unit code from above.] Code	9 How many acres were treated with this product? Acres	10 How many times was this product applied? Number
01	65 3 .0 0	73 .__ __	74 13	77 6.0	79 1
02	65 3 .2 0	73 .__ __	74 15	77 6.0	79 1
03	65 .__ __	73 .__ __	74	77 .__	79

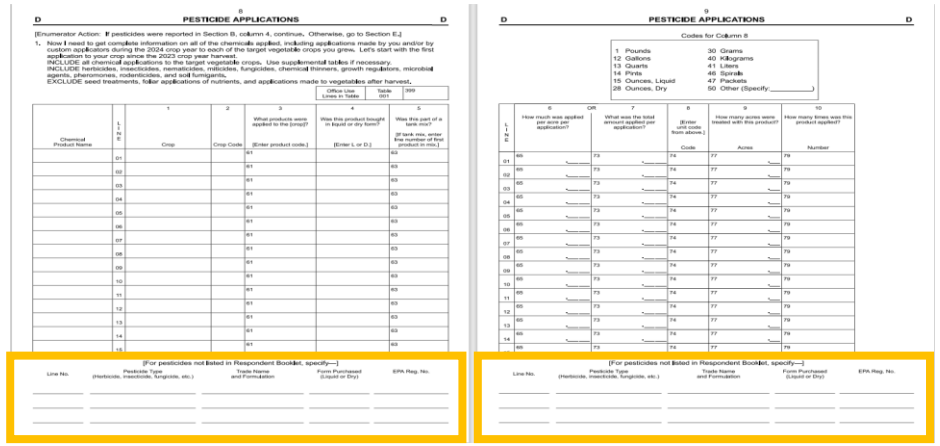
Pesticide Table: Tank Mix

- One application of Diazinon AG500 at a rate of 3 quarts per acre tank mixed with Lambda-Cy Ag at a rate of 3.2 fluid ounces per acre sprayed across six acres of Onions.

Chemical Product Name	LINE	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.]
DIAZINON AG 500	01	Onion	624	61 11326	L	63 1
LAMBDA-CY AG	02	Onion	624	61 11362	L	63 1
	03			61		63

LINE	6 How much was applied per acre per application?	OR 7 What was the total amount applied per application?	8 [Enter unit code from above.] Code	9 How many acres were treated with this product? Acres	10 How many times was this product applied? Number
01	65 3 .0 0	73 .__ __	74 13	77 6.0	79 1
02	65 3 .2 0	73 .__ __	74 15	77 6.0	79 1
03	65 .__ __	73 .__ __	74	77 .__	79

Pesticide Table: Unknown Product



[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.
3	Fungicide	Theia Fungicide	D	94713-2

Chemical Product Name	LINE	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.]
DIAZINON AG500	01	Onion	624	61 11326	L	63 1
LAMBDA-CY AG	02	Onion	624	61 11362	L	63 1
THEIA FUNGICIDE	03	Onion	624	61	D	63

LINE	6 How much was applied per acre per application?	OR	7 What was the total amount applied per application?	8 [Enter unit code from above.] Code	9 How many acres were treated with this product? Acres	10 How many times was this product applied? Number
01	65 3.00		73 .__ __	74 13	77 6.0	79 1
02	65 3.20		73 .__ __	74 15	77 6.0	79 1
03	65 5.00		73 .__ __	74 1	77 6.0	79 1

Pesticide Table: Out of Space

- If you run out of rows in the pesticide table on the questionnaire, use a pesticide supplement to continue to fill out the section.
- Do not carry tank mixes across tables. All products within the same tank mix should be on the same table. It is OK to leave one or more blank lines at the bottom of a table to accommodate this situation.
- If you run out of rows on the supplement, request additional supplements from your NASDA supervisor or Regional Field Office.

Helpful Hints for Section D

- Record keeping requirements can help the respondent report pesticide applications.
- Do not record the spray volume applied to the field, only the volume of the actual product that is applied.
- Ask the respondent to clarify if the product was in a liquid or dry state when it was purchased, not how it was applied.
- If you cannot determine the product or formulation being used from the operator's records, try to find an EPA registration number for the product.

Section E - Pest Management Practices

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to return to
topic list

Brad Medlock
Upper Midwest Region

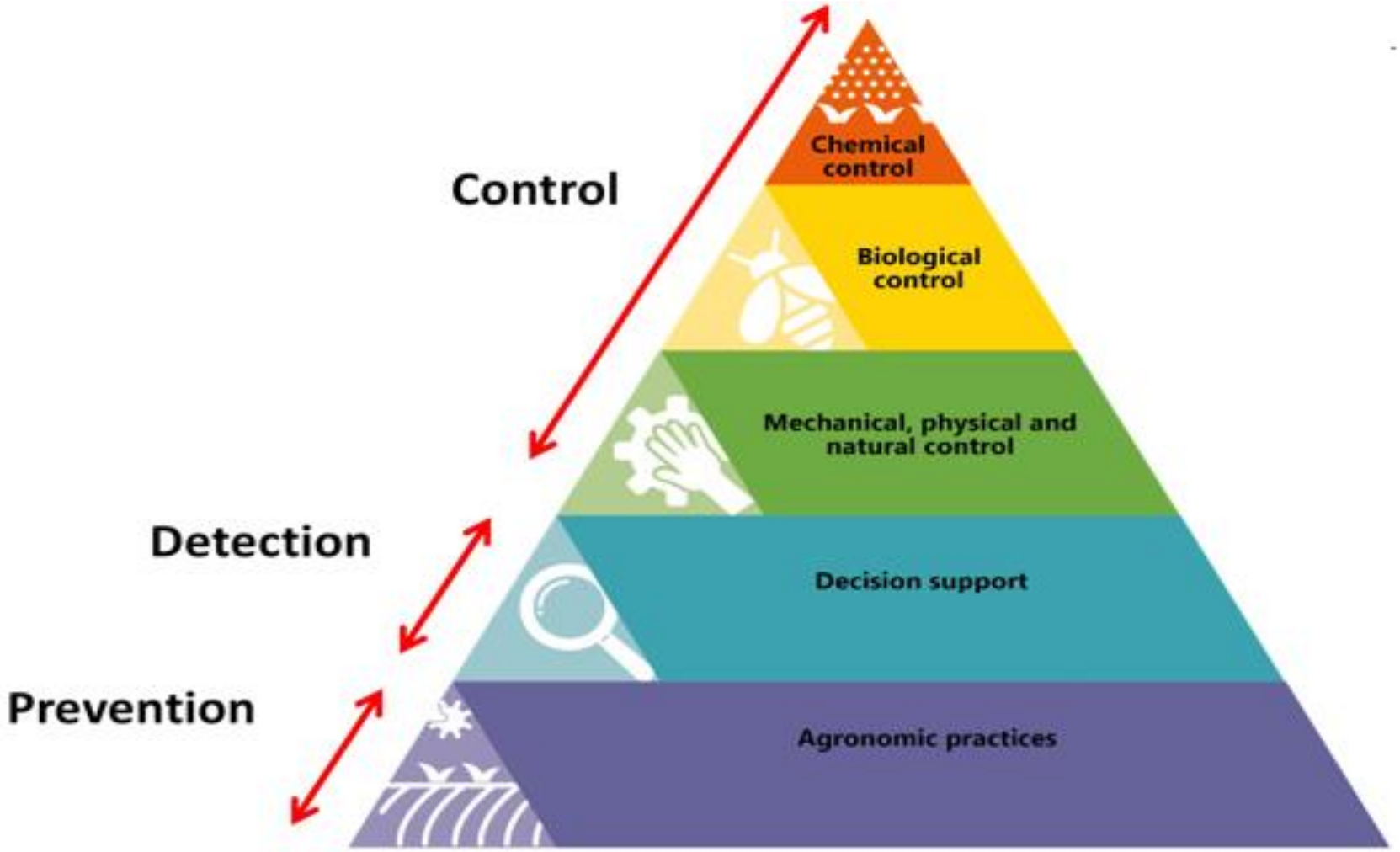
Section E: Purpose

- To provide data about pest management practices that growers use on their crops.
- Alternative to pesticides
- Practices which improve the effectiveness of pesticides

Section E: Pest Management

- What do we define as Pests?
  - Weeds
  - Insects
  - Diseases
  - Fungus

Section E: Pest Management



Filling out the Questionnaire

- Pay Attention to Skip Codes

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

“Were your vegetable acres scouted for…”

1	2	3
7. Were your vegetable acres scouted for —	Yes = 1 No = 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:_____) Code
a. weeds?	612	614
b. insects or mites?	615	617
c. disease?	618	620

Specific Practices of Managing Pests

		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

Section E: Key Points

- Remember how we define pest for this survey
- Be careful with your skip codes
- Leave detailed notes
- If you have questions, ask them

Conclusion

Starting/Ending Time

CONCLUSION

[Thank the respondent, then review this questionnaire.]

H H M M

0005

Ending time [Military]..... ____ ____ ____ ____

If the interview took more than one day, then make notes outside the box so that total elapsed time can be calculated.

Record & Supplement Use

Record Use

[Did respondent use operation records to report —]

		Code
Pesticide data.....	Yes=1 No=3	064

Supplement Use

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

	Number
Pesticide Supplements.....	068

Contact Information

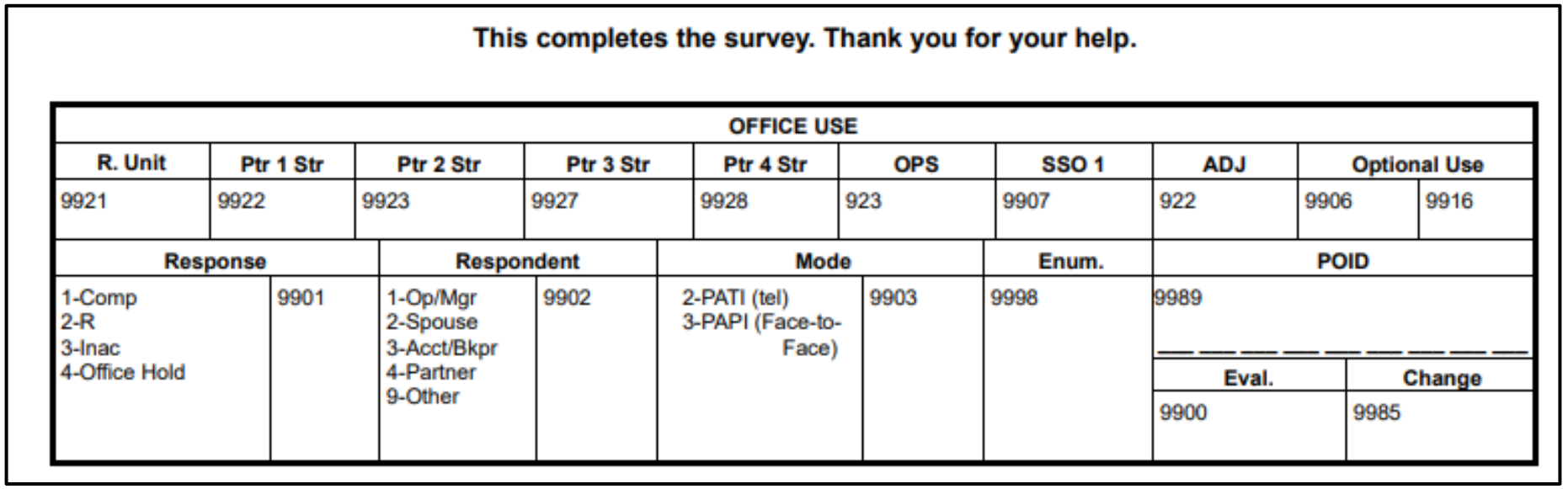
Contact Information

Operator Email:		Operator Phone:	
9929	9917 Check to receive results by email ☐	9918 ( ) _____	check if cell phone ☐
Operation Email: (if different from above)		**Operation Phone: (if different from above)**	
9937	9920 Check to receive results by email ☐	9936 ( ) _____	check if cell phone ☐

Respondent Name:	Respondent Phone (if different from above)		
9912 _____	9911 ( ) _____	check if cell phone ☐	9910 MM DD YY Date: __ __ __ __ __ __

Conclusion

- Be sure to fill out the bottom of the back page!



This completes the survey. Thank you for your help.

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	
							Eval.	Change
							9900	9985

Click Here
to return to
topic list

AZ CA Survey Differences

Major Survey Differences

- Arizona and California do not have Section D. They instead get their pesticide data from the state side.
  - California EPA's Department of Pesticide Regulation (DPR)
  - Arizona Department of Agriculture - Environmental Services Division (ADA-ESD)
- Arizona begins data collection in July because of their cropping practices.

Pesticide Data Collection – AZ/CA

- All operators report pesticide application intentions to their counties by site, including:
  - Site ID
  - Pesticide product
    - Crop the pesticide is applied to
  - Specifications of actual application intentions
- Afterwards, counties report to the state and the state shares the data with NASS once a month.

Minor Survey Differences

- The California list of target crops and codes is at the bottom of Section B, page 6.
- In California Section B, new plantings and other plantings of asparagus and strawberries which are not yet bearing are included in the vegetable acreage.
- For California, record the month, day, and year in which the crop year harvest was completed and the CAL-EPA Site Location Number.

CAL-EPA ID's

- The CAL-EPA ID helps the RFO stat correctly assign the pesticide data for each crop and acres to the correct poid.
- For operations which use multiple CAL-EPA ID's, you must record CAL-EPA Site Location (Field Identification) Numbers (page 7) for all crops listed in column 1 of the Vegetable Acreage table (page 6).
- Some counties require their farmers to reapply for a new ID annually, while other counties can renew the same ID, so it is important to verify 2024 ID's.

CAL-EPA ID's

5. What ID (pesticide permit number) does this operation use for reporting pesticide applications on the target crop acres to the County Agricultural Commissioners?

County		Number				

a. Is this ID used to report pesticide applications for any other operations?

1 ☐ Yes – Continue 3 ☐ No – Go to item 6

b. What other operation(s) is this ID used to report for?

Name:_____	Name:_____
Address:_____	Address:_____
Phone:(_____)_____ ☐ Check if cell phone	Phone:(_____)_____ ☐ Check if cell phone

6. Does the operation use any other ID's to report pesticide applications on the target crops bearing acres to the County Agricultural Commissioners?

1 ☐ Yes – Continue 3 ☐ No – Go to Section A

Thank you!