



2011 FRUIT CHEMICAL USE SURVEY



NATIONAL AGRICULTURAL STATISTICS SERVICE

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VERSION	ID	SUBTRACT
01	_____	_____

ENTERPRISE

CONTACT RECORD		
DATE	TIME	NOTES

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

We are collecting information on chemical use and need your help to make the information as accurate as possible. Authority for collection of information on the Fruit Chemical Use Survey 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**.

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

BEGINNING TIME [MILITARY]. 004

Name _____

Address _____

Phone (____) _____

[Check if name and address are verified.]

*[Read or show label to respondent to verify the name(s) and spelling. Make corrections or additions **on label**.]*

1. During 2011, were any crops (*including new plantings*), livestock or poultry on the total acres operated? (*Exclude crops produced by a tenant if [target] operator is landlord only.*) **YES** - [Go to item 1, page 3.] **NO** - [Continue.]

2. During 2011, did this operation sell any agricultural products or receive government agricultural payments? (*Exclude crops produced by a tenant if [target] operator is landlord only.*) **YES** - [Go to item 1, page 3.] **NO** - [Continue.]

3. During 2011, were any crops stored on the total acres operated? (*Exclude crops produced by a tenant if [target] operator is landlord only.*) **YES** - [Go to item 1, page 3.] **NO** - [Continue.]

4. During 2011, did this operation have any fruit acres which were operated by a **management firm**? **YES** - [Go to item 1, page 3.] **NO** - [Go to page 2.]

CHANGE IN OPERATOR

[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 Conclusion, page 16.]

YES - [Enter code 1, complete name and address information below for new operator, then go to Conclusion, page 16.].....

CODE

023

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

[ENUMERATOR NOTE: *If the operation on the face page was in business part of the 2011 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.*]

SCREENING

1. Did this operation grow any bearing acres of target fruit(s) during the 2011 crop year? (*Include crops grown but abandoned or lost. Refer to list on page 4, TARGET CROPS & CODES.*)

- YES** - [Go to item 2.]
- NO** - [Write notes explaining situation and conclude interview.]

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

TARGET CROPS & CODES

FLORIDA

320 Grapefruit
335 Oranges, All
346 Tangelos
349 Tangerines

NEW JERSEY

309 Blueberries
340 Peaches

OREGON

301 Apples
307 Blackberries
309 Blueberries
312 Cherries, Sweet
341 Pears
345 Raspberries

GEORGIA

309 Blueberries
340 Peaches

NEW YORK

301 Apples
314 Cherries, Tart
324 Grapes, All

SOUTH CAROLINA

340 Peaches

MICHIGAN

301 Apples
309 Blueberries
312 Cherries, Sweet
314 Cherries, Tart
340 Peaches

NORTH CAROLINA

301 Apples
309 Blueberries

TEXAS

320 Grapefruit
340 Peaches

ACRES OPERATED

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 . ____
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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 in fruit? (Include both target and non-target acres as well as bearing and non-bearing acreage in trees, vineyards and bushes.)	803 . ____
---	------------

FRUIT ACREAGE

1. What **target fruit crops** were on these [Section A, item 4] acres during the 2011 crop year? (**Exclude** new plantings and other plantings which are not yet bearing.)

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

L I N E	1	2	3	6
	CROP	CROP CODE	How many BEARING acres of [crop] did this operation have? ACRES	Were any herbicides, insecticides, fungicides, etc. applied to this crop? [YES = 1]
01			11 . __	13
02			11 . __	13
03			11 . __	13
04			11 . __	13
05			11 . __	13
06			11 . __	13
07			11 . __	13
08			11 . __	13
09			11 . __	13
10			11 . __	13
11			11 . __	13
12			11 . __	13
13			11 . __	13
14			11 . __	13
15			11 . __	13

- INCLUDE**
- **TARGET CROPS ONLY.**
 - All commercial bearing acreage equal to or greater than one tenth of an acre.
 - All bearing acreage of TARGET CROPS for processing or fresh market.
 - All bearing acreage of TARGET CROPS for roadside stands, farmer's markets or U-pick sales.
 - Bearing acreage not harvested due to weather, economic or other reasons.
 - Crops planted in the fall of 2010 if they were part of the 2011 crop.
- EXCLUDE**
- All crops grown in another state.
 - Non-commercial orchard and vineyard acreage (home garden).
 - Non-target fruits.
 - New plantings and other plantings which are not yet bearing.
 - **ALL TARGET CROPS** grown by institutional, experimental, research and university farms (abnormal farms).
 - Abandoned orchards and vineyards.

NOTES: _____

D

PESTICIDE APPLICATIONS

D

Now I have some questions about pesticide and chemical applications to your **bearing fruit acreage** before harvest. Please consider all applications made to trees, vineyards or bushes which occurred **after last season's harvest**.

- 1. Since last year's (2010) harvest, did you use **herbicides** on any of your bearing fruit acreage? **YES** **NO**

- 2. Since last year's (2010) harvest, did you use **insecticides, nematicides or miticides** on any of your bearing fruit acreage? **YES** **NO**

- 3. Since last year's (2010) harvest, did you use any **fungicides or bactericides** on any of your bearing fruit acreage? **YES** **NO**

- 4. Since last year's (2010) harvest, did you use any other chemicals such as chemical thinners, growth regulators, microbial agents, pheromones, rodenticides, soil fumigants, etc. on any of your bearing fruit acreage? **YES** **NO**

[ENUMERATOR NOTE: *If ALL items 1-4 are NO, go to Section E, page 14; else continue.*]

D PESTICIDE APPLICATIONS D

[ENUMERATOR NOTE: If pesticides were reported in Section B, Column 6, continue. Otherwise, skip to Section E.]

6. 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 2011 crop year to each of the **target fruit crops** you grew. **Let's start with the first application to your [crop] since the 2010 crop year harvest.**

[Complete the table for all chemical applications to the target fruit. 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 fruit after harvest.)

OFFICE USE LINES IN TABLE	TABLE	001	LINE 99	399
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	L I N E	1 CROP	2 CROP CODE	3 What products were applied to the [crop]? <i>[Enter product code.]</i>	4 Was this product bought in liquid or dry form? <i>[Enter L or D.]</i>	5 Was this part of a tank mix? <i>[If tank mix, enter line number of first product in mix.]</i>
	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 <i>(Herbicide, Insecticide, Fungicide, etc.)</i>	Trade Name and Formulation	Form Purchased <i>(Liquid or Dry)</i>	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 (Specify: _____)

LINE	6 OR 7		8	9	10	11
	How much was applied per acre per application?	What was the total amount applied per application?	[Enter unit code from above.]	What percent of the rows were covered? 100 All Rows 50 Every Other Row --- Other	How many acres were treated with this product? [Include bearing acres only.]	How many times was it applied?
			CODE	[Enter percent covered.]	BEARING ACRES	NUMBER
01	65	73	74	75	77	79
02	65	73	74	75	77	79
03	65	73	74	75	77	79
04	65	73	74	75	77	79
05	65	73	74	75	77	79
06	65	73	74	75	77	79
07	65	73	74	75	77	79
08	65	73	74	75	77	79
09	65	73	74	75	77	79
10	65	73	74	75	77	79
11	65	73	74	75	77	79
12	65	73	74	75	77	79
13	65	73	74	75	77	79
14	65	73	74	75	77	79
15	65	73	74	75	77	79

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

Line No.	Pesticide Type <i>(Herbicide, Insecticide, Fungicide, etc.)</i>	Trade Name 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		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 Formulation	Form Purchased (Liquid or Dry)	EPA Reg. No.
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

D

PESTICIDE APPLICATIONS

D

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 (<i>Specify: _____</i>)

LINE	6	OR	7	8	9	10	11
	How much was applied per acre per application?		What was the total amount applied per application?	[Enter unit code from above.] CODE	What percent of the rows were covered? 100 All Rows 50 Every Other Row --- Other [Enter percent covered.]	How many acres were treated with this product? [Include bearing acres only.] BEARING ACRES	How many times was it applied? NUMBER
16	65		73	74	75	77	79
17	65		73	74	75	77	79
18	65		73	74	75	77	79
19	65		73	74	75	77	79
20	65		73	74	75	77	79
21	65		73	74	75	77	79
22	65		73	74	75	77	79
23	65		73	74	75	77	79
24	65		73	74	75	77	79
25	65		73	74	75	77	79
26	65		73	74	75	77	79
27	65		73	74	75	77	79
28	65		73	74	75	77	79
29	65		73	74	75	77	79
30	65		73	74	75	77	79
31	65		73	74	75	77	79
32	65		73	74	75	77	79
33	65		73	74	75	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.
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

D PESTICIDE APPLICATIONS

D

CHEMICAL PRODUCT NAME	L I N E	1	2	3	4	5
		CROP	CROP CODE	What products were applied to the [crop]? [Enter product code.]	Was this product bought in liquid or dry form? [Enter L or D.]	Was this part of a tank mix? [If tank mix, enter line number of first product in mix.]
	34			61		63
	35			61		63
	36			61		63
	37			61		63
	38			61		63
	39			61		63
	40			61		63
	41			61		63
	42			61		63
	43			61		63
	44			61		63
	45			61		63
	46			61		63
	47			61		63
	48			61		63
	49			61		63
	50			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.
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

D

PESTICIDE APPLICATIONS

D

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 (<i>Specify: _____</i>)

LINE	6	OR	7	8	9	10	11
	How much was applied per acre per application?		What was the total amount applied per application?	[Enter unit code from above.] CODE	What percent of the rows were covered? 100 All Rows 50 Every Other Row --- Other [Enter percent covered.]	How many acres were treated with this product? [Include bearing acres only.] BEARING ACRES	How many times was it applied? NUMBER
34	65		73	74	75	77	79
35	65		73	74	75	77	79
36	65		73	74	75	77	79
37	65		73	74	75	77	79
38	65		73	74	75	77	79
39	65		73	74	75	77	79
40	65		73	74	75	77	79
41	65		73	74	75	77	79
42	65		73	74	75	77	79
43	65		73	74	75	77	79
44	65		73	74	75	77	79
45	65		73	74	75	77	79
46	65		73	74	75	77	79
47	65		73	74	75	77	79
48	65		73	74	75	77	79
49	65		73	74	75	77	79
50	65		73	74	75	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.
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

E PEST MANAGEMENT PRACTICES E

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

[Enumerator Action: Were PESTICIDE APPLICATIONS reported in Section B, column 6 on page 6?]

YES - [Continue.] **No** - [Go to item 4.]

- | | YES = 1 | CODE |
|--|---------|------|
| 1. Was weather data used to assist in determining either the need or 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? | YES = 1 | 601 |
| 3. 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 |
| 4. In 2011, how were your fruit acres primarily scouted for insects, weeds, diseases and/or beneficial organisms? | | |
| 1 By deliberately going to the fruit acres specifically for scouting activities. (<i>Enter code 1 and go to item 5.</i>)
2 By conducting general observations while performing routine tasks. (<i>Enter code 2 and go to item 7.</i>)
3 The fruit acres were not scouted. (<i>Enter code 3 and go to item 10.</i>) | | 608 |
| 5. Was an established scouting process used (<i>systemic sampling, recording counts, insect traps, etc.</i>) on any fruit acres? | YES = 1 | 609 |
| 6. Was scouting for pests done on these fruit 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]—
7. Were your fruit acres scouted for ---	YES = 1	CODE
a. weeds?	612	614
b. insects or 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

E PEST MANAGEMENT PRACTICES

E

		CODE
8.	Were written or electronic records kept to track the activity or numbers of weeds, insects or diseases?	623
	YES = 1	
9.	Was scouting data compared to published information on infestation thresholds to determine when to take measures to manage pests?	624
	YES = 1	
10.	Was field mapping data used for making pest management decisions?	625
	YES = 1	
11.	Were the services of a diagnostic laboratory used for pest identification or soil or plant tissue pest analysis?	626
	YES = 1	
12.	Were crop residues (<i>including drops, rotting fruit and/or debris</i>) removed to manage pests?	627
	YES = 1	
13.	Were ground covers, mulches, or other physical barriers maintained to manage pest problems?	629
	YES = 1	
14.	Were any beneficial organisms (<i>insects, nematodes, fungi</i>) applied or released to manage pests?	636
	YES = 1	
15.	Were floral lures, attractants, repellants, pheromone traps or other biological pest controls used on any fruit acres?	637
	YES = 1	
16.	Were any fruit acres cultivated for weed control during the growing season?	640
	YES = 1	
17.	Were field edges, lanes, ditches, roadways or fence lines chopped, mowed, plowed, or burned to manage pests on any fruit acres?	642
	YES = 1	
18.	Were equipment and implements cleaned after completing field work to reduce the spread of pests?	643
	YES = 1	
19.	Were any fruit acres irrigated for the 2011 crops?	644
	YES = 1	
a.	<i>[If item 19 is YES, ask--]</i>	
	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 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.

Pesticide Supplements.

NUMBER

068

Reported by: _____ 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						11	- - - - -		
S/E Name											