

SCREENING



**NATIONAL
AGRICULTURAL
STATISTICS
SERVICE**

U.S. Department of Agriculture
Rm 5809, South Building
Washington, D.C. 20250
202-720-7017

1997 FRUIT CHEMICAL USE SURVEY

Form Approved
O.M.B. Number 0535-0218
Approval Expires 9/30/99
Project Code 141

ENTERPRISE

VERSION	ID	SUBTRACT	T-TYPE	TABLE	LINE
1	_____	__	0	000	00

CONTACT RECORD		
DATE	TIME	NOTES

RESPONSE CODES	
3 - COMPLETED 4 - SCREENOUT 5 - NO TARGET CROPS 8 - REFUSAL 9 - INACCESSIBLE	001
OPTIONAL	002

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

BEGINNING TIME [MILITARY]

003	_____
-----	-------

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. This information will be used for analysis and to compile and publish estimates for your state and the United States. Response to this survey is confidential and voluntary.

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

[Read or show label to respondent to verify the name(s) and spelling, and ask if the operation did business under any other name, such as a farm or ranch name. Make corrections or additions **on label**. Verify partner labels on page 2 and make corrections if necessary. Begin interview with item 1 below.]

- During 1997, were any crops (including new plantings), livestock or poultry on the total acres operated? ☐ **YES** - [Go to item 6.] ☐ **NO** - [Continue.]
- During 1997, did this operation sell any agricultural products or receive government agricultural payments? (**Exclude** any income received as a landlord.) ☐ **YES** - [Go to item 6.] ☐ **NO** - [Continue.]
- During 1997, 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 6.] ☐ **NO** - [Continue.]
- During 1997, did this operation have any fruit acres which were operated by a management firm? ☐ **YES** - [Go to item 6.] ☐ **NO** - [Continue.]

↓
[Go to page 2, item 5.]

2
SCREENING

PARTNERS: LSF ID _____	LSF ID _____
PARTNER NAME	PARTNER NAME
ADDRESS	ADDRESS
CITY STATE ZIP PHONE NUMBER	CITY STATE ZIP PHONE NUMBER

5. **/ENUMERATOR ACTION:** (Items 1-4 on the face page are all NO and Record Status = 99?)

- ☐ **YES** - [Go to item 12.] ☐ **NO** - [Go to item 8.]

6. During the 1997 crop year, did [operation named on face page] have any [read list of target crops from showcard] of bearing age?

- ☐ **YES** - [Enter code 1 and continue.] ☐ **NO** - [Continue.]

CODE

004

7. **/ENUMERATOR ACTION:** Does RS = 99?

- ☐ **YES** - [If item 6 was **NO**, enter response code 5 and conclude interview.
If item 6 was **YES**, go to item 10.]
- ☐ **NO** - [Continue.]

**PARTNERS'
STRATUM**

005 ---	006 ---	007 ---	008 ---
------------	------------	------------	------------

8. During 1997, did you [target name] make any day-to-day decisions for any other farms or ranches?

- ☐ **YES** -
- Verify operations and partners labeled on page 3. If (target name) wasn't involved in a labeled operation during 1997, **mark out label**.
 - Update page 3 with other operations where (target name) made day-to-day decisions as an **individual operator or partner**. If there are more than 2 other operations, place the additional operation(s) on the bottom of page 3.33.
- ☐ **NO** -
- If item 6 was **YES**, go to item 10.
 - If item 6 was **NO**, enter response code 5 and conclude interview.
 - If item 5 was **NO**, enter response code 4 and go to item 12.

9. **/ENUMERATOR ACTION:**

- If item 6 was **YES**, complete item 10 for operation on face page.
- If item 5 was **NO**, enter response code 4 and go to item 12.
- If item 6 was **NO**, enter response code 5 and conclude the interview.]

10. During 1997, were the day-to-day decisions for this farming/ranching operation made by--

- ☐ an individual operator? [Enter 1 in the Reporting Unit cell.]
- ☐ partners? [Enter number of partners (including operator) in Reporting Unit cell.]
- ☐ a hired manager? [Enter 8 in the Reporting Unit cell.]

REPORTING UNIT

009

ADJUSTMENT FACTOR

010

11. **/ENUMERATOR ACTION:** [Go to page 3.33 and begin the interview.]

SCREENING

OPERATION 2: →	<input type="checkbox"/> PARTNERSHIP <input type="checkbox"/> INDIVIDUAL	PARTNERS: _____ LSF ID _____											
OPERATION NAME (IF ANY)		PARTNER NAME											
OPERATOR NAME		ADDRESS											
ADDRESS		CITY STATE ZIP PHONE NUMBER											
CITY STATE ZIP PHONE NUMBER													
8a. During the 1997 crop year, did this operation have any bearing fruit acreage? <input type="checkbox"/> YES <input type="checkbox"/> NO - [Go to next operation.]		LSF ID											
		PARTNER NAME											
		ADDRESS											
		CITY STATE ZIP PHONE NUMBER											
		8b. How many bearing acres of all fruit (not just target crops) did this operation have? .. ACRES	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">011</td> <td style="width: 25%;">013</td> <td style="width: 25%;">014</td> <td style="width: 25%;">015</td> <td style="width: 25%;">016</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	011	013	014	015	016					
011	013	014	015	016									
OPERATION 3: →		<input type="checkbox"/> PARTNERSHIP <input type="checkbox"/> INDIVIDUAL	PARTNERS: _____ LSF ID _____										
OPERATION NAME (IF ANY)		PARTNER NAME											
OPERATOR NAME		ADDRESS											
ADDRESS		CITY STATE ZIP PHONE NUMBER											
CITY STATE ZIP PHONE NUMBER													
8a. During the 1997 crop year, did this operation have any bearing fruit acreage? <input type="checkbox"/> YES <input type="checkbox"/> NO - [Go to next operation.]		LSF ID											
		PARTNER NAME											
		ADDRESS											
		CITY STATE ZIP PHONE NUMBER											
		8b. How many bearing acres of all fruit (not just target crops) did this operation have? .. ACRES		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">012</td> <td style="width: 25%;">017</td> <td style="width: 25%;">018</td> <td style="width: 25%;">019</td> <td style="width: 25%;">020</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>		012	017	018	019	020			
012	017	018	019	020									

GO BACK TO ITEM 9 ON PAGE 2

12. Is anyone now operating the land you [operation on face page] formerly operated?

☐ **YES** - [Enter code 1, and complete information below for new operator.]

CODE

021

☐ **NO** - [Make notes and conclude interview.]

Name _____	
Address _____	
Phone (____) _____	
LSF ID	022
STRATUM	023

CHEMICAL EDIT TABLES

300

A

LAND OPERATED

A

TOTAL ACRES IN THIS OPERATING ARRANGEMENT

(Include the farmstead, all cropland, pastureland, wasteland, wetland, woodland and government program land. Include land in other states.)

1. During the 1997 crop year, how many total acres did this operation--

ACRES

a. own? +

030		. ____
-----	--	--------

b. rent **FROM** others?
(Exclude land used on an AUM basis.) +

031		. ____
-----	--	--------

c. rent **TO** others?
(Include privately owned/rented land administered
by a public agency through exchange-of-use.) -

032		. ____
-----	--	--------

d. operate during some part of the year and rent to
another operation for the other part of the year? +

033		. ____
-----	--	--------

e. Then the **TOTAL** acres in this operation including
the farmstead, all cropland, pastureland, wasteland,
wetland, woodland and government program land
was-- [total of 1a + 1b - 1c + 1d]? =

034		. ____
-----	--	--------

2. Have I accounted for the farmstead, all cropland, pastureland, wasteland,
wetland, woodland and government program land in this operation?

☐ **YES** - [Continue.]

☐ **NO** - [Make corrections, then continue.]

CHEMICAL EDIT TABLES

300

B **FRUIT ACREAGE and PRODUCTION****B**

1. What **target fruit crops** were on these [Section A, item 1e] acres during the 1997 crop year?
[Exclude new plantings and other plantings which are not yet bearing.]

T-TYPE 1	TABLE 001
LINE 99	199

L I N E	1 CROP	2 CROP CODE	3 How many BEARING acres of [crop] did this operation have?	5 What was the TOTAL production of this crop for all uses in the 1997 crop year?	6 How many of these [column 3] acres were certified ORGANICALLY grown?	7 What was the total production from the organically produced acres?	8 How much did the [column 5 or 7] unit weigh? [If unit was pounds, enter 1.0.]
			ACRES	UNIT	ACRES	UNIT	POUNDS
01		101	102 _____	104	105 _____	106	107 _____
02		101	102 _____	104	105 _____	106	107 _____
03		101	102 _____	104	105 _____	106	107 _____
04		101	102 _____	104	105 _____	106	107 _____
05		101	102 _____	104	105 _____	106	107 _____
06		101	102 _____	104	105 _____	106	107 _____
07		101	102 _____	104	105 _____	106	107 _____
08		101	102 _____	104	105 _____	106	107 _____
09		101	102 _____	104	105 _____	106	107 _____
10		101	102 _____	104	105 _____	106	107 _____
11		101	102 _____	104	105 _____	106	107 _____
12		101	102 _____	104	105 _____	106	107 _____
13		101	102 _____	104	105 _____	106	107 _____
14		101	102 _____	104	105 _____	106	107 _____
15		101	102 _____	104	105 _____	106	107 _____

NOTES: _____

<i>L I N E</i>	<i>9</i> <i>Were any herbicides, insecticides, fungicides, etc. applied to this crop?</i> <i>[YES = 1]</i>
<i>01</i>	108
<i>02</i>	108
<i>03</i>	108
<i>04</i>	108
<i>05</i>	108
<i>06</i>	108
<i>07</i>	108
<i>08</i>	108
<i>09</i>	108
<i>10</i>	108
<i>11</i>	108
<i>12</i>	108
<i>13</i>	108
<i>14</i>	108
<i>15</i>	108

INCLUDES & EXCLUDES & ENUMERATOR NOTE

- 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.***

- EXCLUDE:***
- ***ALL CROPS GROWN IN ANOTHER STATE.***
 - ***Non-commercial orchard and vineyard acreage.***
 - ***New plantings and other plantings which are not yet bearing.***
 - ***All TARGET CROPS grown by institutional, experimental, research and university farms.***
 - ***Abandoned orchards and vineyards.***

ENUMERATOR NOTE:

- ***If production is a valid zero for target commodities with positive acres (in Section B table), make a note explaining why no production was harvested. (Weather, economic factors, etc.)***

CROP CODES

FLORIDA

AVOCADOS, 55
GRAPEFRUIT,
 2075 FRESH MARKET ONLY
 4075 PROCESSING ONLY
 75 FRESH & PROCESSING

LIMES,
 2077 FRESH MARKET ONLY
 4077 PROCESSING ONLY
 77 FRESH & PROCESSING

ORANGES,
 2079 FRESH MARKET ONLY
 4079 PROCESSING ONLY
 79 FRESH & PROCESSING

TANGELOS,
 2080 FRESH MARKET ONLY
 4080 PROCESSING ONLY
 80 FRESH & PROCESSING

TANGERINES,
 2081 FRESH MARKET ONLY
 4081 PROCESSING ONLY
 81 FRESH & PROCESSING

TEMPLES,
 2158 FRESH MARKET ONLY
 4158 PROCESSING ONLY
 158 FRESH & PROCESSING

GEORGIA

APPLES,
 2053 FRESH MARKET ONLY
 4053 PROCESSING ONLY
 53 FRESH & PROCESSING

BLUEBERRIES,
 2057 FRESH MARKET ONLY
 4057 PROCESSING ONLY
 57 FRESH & PROCESSING

PEACHES,
 2068 FRESH MARKET ONLY
 4068 PROCESSING ONLY
 68 FRESH & PROCESSING

MICHIGAN

APPLES,
 2053 FRESH MARKET ONLY
 4053 PROCESSING ONLY
 53 FRESH & PROCESSING

BLUEBERRIES,
 2057 FRESH MARKET ONLY
 4057 PROCESSING ONLY
 57 FRESH & PROCESSING

GRAPES,
 2063 TABLE ONLY
 4063 WINE/JUICE ONLY

PEACHES,
 2068 FRESH MARKET ONLY
 4068 PROCESSING ONLY
 68 FRESH & PROCESSING

SWEET CHERRIES,
 2155 FRESH MARKET ONLY
 4155 PROCESSING ONLY
 155 FRESH & PROCESSING

TART CHERRIES,
 2156 FRESH MARKET ONLY
 4156 PROCESSING ONLY
 156 FRESH & PROCESSING

NEW JERSEY

APPLES,
 2053 FRESH MARKET ONLY
 4053 PROCESSING ONLY
 53 FRESH & PROCESSING

BLUEBERRIES,
 2057 FRESH MARKET ONLY
 4057 PROCESSING ONLY
 57 FRESH & PROCESSING

PEACHES,
 2068 FRESH MARKET ONLY
 4068 PROCESSING ONLY
 68 FRESH & PROCESSING

NEW YORK

APPLES,
 2053 FRESH MARKET ONLY
 4053 PROCESSING ONLY
 53 FRESH & PROCESSING

GRAPES,
 2063 TABLE ONLY
 4063 WINE/JUICE ONLY

PEACHES,
 2068 FRESH MARKET ONLY
 4068 PROCESSING ONLY
 68 FRESH & PROCESSING

PEARS,
 2069 FRESH MARKET ONLY
 4069 PROCESSING ONLY
 69 FRESH & PROCESSING

TART CHERRIES,
 2156 FRESH MARKET ONLY
 4156 PROCESSING ONLY
 156 FRESH & PROCESSING

NORTH CAROLINA

APPLES,
 2053 FRESH MARKET ONLY
 4053 PROCESSING ONLY
 53 FRESH & PROCESSING

BLUEBERRIES,
 2057 FRESH MARKET ONLY
 4057 PROCESSING ONLY
 57 FRESH & PROCESSING

PEACHES,
 2068 FRESH MARKET ONLY
 4068 PROCESSING ONLY
 68 FRESH & PROCESSING

PENNSYLVANIA

APPLES,
 2053 FRESH MARKET ONLY
 4053 PROCESSING ONLY
 53 FRESH & PROCESSING

GRAPES,
 2063 TABLE ONLY
 4063 WINE/JUICE ONLY

PEACHES,
 2068 FRESH MARKET ONLY
 4068 PROCESSING ONLY
 68 FRESH & PROCESSING

PEARS,
 2069 FRESH MARKET ONLY
 4069 PROCESSING ONLY
 69 FRESH & PROCESSING

TART CHERRIES,
 2156 FRESH MARKET ONLY
 4156 PROCESSING ONLY
 156 FRESH & PROCESSING

OREGON

APPLES,
 2053 FRESH MARKET ONLY
 4053 PROCESSING ONLY
 53 FRESH & PROCESSING

BLACKBERRIES,
 2056 FRESH MARKET ONLY
 4056 PROCESSING ONLY
 56 FRESH & PROCESSING

BLUEBERRIES,
 2057 FRESH MARKET ONLY
 4057 PROCESSING ONLY
 57 FRESH & PROCESSING

GRAPES,
 2063 TABLE ONLY
 4063 WINE/JUICE ONLY

PEARS,
 2069 FRESH MARKET ONLY
 4069 PROCESSING ONLY
 69 FRESH & PROCESSING

RASPBERRIES,
 2140 FRESH MARKET ONLY
 4140 PROCESSING ONLY
 140 FRESH & PROCESSING

SWEET CHERRIES,
 2155 FRESH MARKET ONLY
 4155 PROCESSING ONLY
 155 FRESH & PROCESSING

TART CHERRIES,
 2156 FRESH MARKET ONLY
 4156 PROCESSING ONLY
 156 FRESH & PROCESSING

WASHINGTON

APPLES,
 2053 FRESH MARKET ONLY
 4053 PROCESSING ONLY
 53 FRESH & PROCESSING

GRAPES,
 2063 TABLE ONLY
 4063 WINE/JUICE ONLY

PEACHES,
 2068 FRESH MARKET ONLY
 4068 PROCESSING ONLY
 68 FRESH & PROCESSING

PEARS,
 2069 FRESH MARKET ONLY
 4069 PROCESSING ONLY
 69 FRESH & PROCESSING

RASPBERRIES,
 2140 FRESH MARKET ONLY
 4140 PROCESSING ONLY
 140 FRESH & PROCESSING

SWEET CHERRIES,
 2155 FRESH MARKET ONLY
 4155 PROCESSING ONLY
 155 FRESH & PROCESSING

SOUTH CAROLINA

APPLES,
 2053 FRESH MARKET ONLY
 4053 PROCESSING ONLY
 53 FRESH & PROCESSING

PEACHES,
 2068 FRESH MARKET ONLY
 4068 PROCESSING ONLY
 68 FRESH & PROCESSING

F **CHEMICAL APPLICATIONS**

F

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

1. Since last years (1996) harvest, did you use **herbicide** on any of your bearing fruit acreage? ☐ **YES** ☐ **NO**
2. Since last years (1996) harvest, did you use **insecticides, nematicides or miticides** on any of your bearing fruit acreage? ☐ **YES** ☐ **NO**
3. Did you use **fungicides** on any of your bearing fruit acreage since last years (1996) harvest? ☐ **YES** ☐ **NO**
4. *Did you use any other chemicals such as growth regulators, chemical thinners, microbial agents, rodenticides, etc.* on any of your bearing fruit acreage since last years (1996) harvest? ☐ **YES** ☐ **NO**
5. **[ENUMERATOR ACTION: Are items 1 - 4 all NO?]**
☐ **YES** - [Go to Section H, page 10.] ☐ **NO** - [Go to item 6, on next page.]

T-TYPE	TABLE
3	001
LINE 99	399
7 OR	8

NOTES:

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.]	6 [Enter line number of first product in the tank mix.]	How much was applied per acre per application?	What was the total amount applied per application?
01		301	302		304	305 · _ _ _	306
02		301	302		304	305 · _ _ _	306
03		301	302		304	305 · _ _ _	306
04		301	302		304	305 · _ _ _	306
05		301	302		304	305 · _ _ _	306
06		301	302		304	305 · _ _ _	306
07		301	302		304	305 · _ _ _	306
08		301	302		304	305 · _ _ _	306
09		301	302		304	305 · _ _ _	306
10		301	302		304	305 · _ _ _	306
11		301	302		304	305 · _ _ _	306
12		301	302		304	305 · _ _ _	306

F **CHEMICAL APPLICATIONS**

F

6. Now I need to get complete information on all of the chemicals you applied during the 1997 crop year to each of the target fruit crops you grew. Let's start with the first application to your [crop].

[Complete the tables for all chemical applications to the target fruit crops. Include bearing acres only. Exclude applications made to fruit after harvest. Use supplemental tables if necessary. If foliar applications of nutrients are reported, don't record these.]

[ENUMERATOR NOTE: *If no code is listed in the Respondent Booklet, record the name and formulation of the product applied, what it was used for (herbicide, insecticide, fungicide, etc.), whether it was liquid or dry, and (if available) its EPA registration number.*

[ENUMERATOR NOTE: *If respondent is not able to report columns 7 or 8, ask respondent to report: **AMOUNT OF PRODUCT** mixed with 100 gallons of water, **NUMBER OF GALLONS PER TANK** and **NUMBER OF TANKS USED.***

LINE	9 [Enter unit code.] 1 POUNDS 12 GALLONS 13 QUARTS 14 PINTS 15 OUNCES 30 GRAMS	10 What percent of the rows were covered? 100 All Rows 50 Every Other Row -- Other [Enter percent covered.]	12 How many times was it applied? NUMBER	13 How many acres were treated with this product? (Include only bearing acres.) ACRES	17 Were these applications made by-- 1 operator, partner, family member 2 custom applicator 3 employee/other CODE	
	01	307	308	310	311 . ____	317
02	307	308	310	311 . ____	317	318
03	307	308	310	311 . ____	317	318
04	307	308	310	311 . ____	317	318
05	307	308	310	311 . ____	317	318
06	307	308	310	311 . ____	317	318
07	307	308	310	311 . ____	317	318
08	307	308	310	311 . ____	317	318
09	307	308	310	311 . ____	317	318
10	307	308	310	311 . ____	317	318
11	307	308	310	311 . ____	317	318
12	307	308	310	311 . ____	317	318

*F***CHEMICAL APPLICATIONS***F*

	<i>L I N E</i>	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.]	6 [Enter line number of first product in the tank mix.]	7 OR	8
							How much was applied per acre per application?	What was the total amount applied per application?
NOTES:			301	302		304	305 · _ _ _	306
	13		301	302		304	305 · _ _ _	306
	14		301	302		304	305 · _ _ _	306
	15		301	302		304	305 · _ _ _	306
	16		301	302		304	305 · _ _ _	306
	17		301	302		304	305 · _ _ _	306
	18		301	302		304	305 · _ _ _	306
	19		301	302		304	305 · _ _ _	306
	20		301	302		304	305 · _ _ _	306
	21		301	302		304	305 · _ _ _	306
	22		301	302		304	305 · _ _ _	306
	23		301	302		304	305 · _ _ _	306
	24		301	302		304	305 · _ _ _	306
	25		301	302		304	305 · _ _ _	306
	26		301	302		304	305 · _ _ _	306
	27		301	302		304	305 · _ _ _	306
	28		301	302		304	305 · _ _ _	306
	29		301	302		304	305 · _ _ _	306
	30		301	302		304	305 · _ _ _	306
	31		301	302		304	305 · _ _ _	306
	32		301	302		304	305 · _ _ _	306
	33		301	302		304	305 · _ _ _	306
	34		301	302		304	305 · _ _ _	306
	35		301	302		304	305 · _ _ _	306
	36		301	302		304	305 · _ _ _	306

*F***CHEMICAL APPLICATIONS***F*

L I N E	9 [Enter unit code.] 1 POUNDS 12 GALLONS 13 QUARTS 14 PINTS 15 OUNCES 30 GRAMS	10 What percent of the rows were covered? 100 All Rows 50 Every Other Row -- Other	12 How many times was it applied?	13 How many acres were treated with this product? (Include only bearing acres.)	17 Were these applications made by-- 1 operator, partner, family member 2 custom applicator 3 employee/other	
		[Enter percent covered.]	NUMBER	ACRES	CODE	
13	307	308	310	311 . ____	317	318
14	307	308	310	311 . ____	317	318
15	307	308	310	311 . ____	317	318
16	307	308	310	311 . ____	317	318
17	307	308	310	311 . ____	317	318
18	307	308	310	311 . ____	317	318
19	307	308	310	311 . ____	317	318
20	307	308	310	311 . ____	317	318
21	307	308	310	311 . ____	317	318
22	307	308	310	311 . ____	317	318
23	307	308	310	311 . ____	317	318
24	307	308	310	311 . ____	317	318
25	307	308	310	311 . ____	317	318
26	307	308	310	311 . ____	317	318
27	307	308	310	311 . ____	317	318
28	307	308	310	311 . ____	317	318
29	307	308	310	311 . ____	317	318
30	307	308	310	311 . ____	317	318
31	307	308	310	311 . ____	317	318
32	307	308	310	311 . ____	317	318
33	307	308	310	311 . ____	317	318
34	307	308	310	311 . ____	317	318
35	307	308	310	311 . ____	317	318
36	307	308	310	311 . ____	317	318

H **PEST MANAGEMENT PRACTICES**

H

[ENUMERATOR NOTE: *Record pest management practices information for the main target fruit crop (in terms of bearing acreage). Refer back to Section B for this information. Enter crop name and code.*]

T-TYPE	TABLE	LINE
0	000	00

CROP NAME

CROP CODE

501

Now I have some questions about pest management practices you may have used on [main target fruit crop].

1. Was this [crop] scouted for (weeds, insects or diseases)--

☐ **YES** - [Enter code 1 and continue.] ☐ **NO** - [Go to item 3.] . . .

WEEDS	INSECTS	DISEASES
502	503	504

2. How many **years** have you been using scouting on [crop] for (weeds, insects or diseases)? YEARS

WEEDS	INSECTS	DISEASES
505	506	507

a. Are written or electronic (weed, insect or disease) records(counts) kept from the scouting for [crop]?

☐ **YES** - [Enter code 1 and continue.] ☐ **NO**

WEEDS	INSECTS	DISEASES
508	509	510

b. Who did the majority of scouting on [crop] for (weeds, insects or diseases)?

- | | |
|---|---|
| 1 | OPERATOR OR FAMILY MEMBER |
| 2 | EMPLOYEE |
| 3 | FARM SUPPLY OR CHEMICAL DEALER |
| 4 | EXTENSION SERVICE |
| 5 | CROP CONSULTANT OR
COMMERCIAL SCOUTING SERVICE |
| 6 | OTHER |



WEEDS	INSECTS	DISEASES
511	512	513

c. [Ask only if item 2b is code 3 or 5.]
How many times did [item 2b, code 3 or 5] scout this target fruit crop during the 1997 crop year? NUMBER

WEEDS	INSECTS	DISEASES
514	515	516

3. What strategy did you use to decide to apply **INSECTICIDES** to [crop]?
[Enter first code that applies.]

- | | |
|---|--|
| 1 | INSECT PROBLEMS IN PREVIOUS YEARS (or schedule) |
| 3 | BASED ON CROP CONSULTANT'S THRESHOLDS
FOR INSECT COUNTS |
| 4 | BASED ON EXTENSION SERVICE THRESHOLDS
FOR INSECT COUNTS |
| 5 | BASED ON OPERATOR'S THRESHOLDS FOR INSECT COUNTS |
| 8 | OTHER [SPECIFY _____] |
| 9 | DID NOT APPLY INSECTICIDES |

CODE

517

H **PEST MANAGEMENT PRACTICES**

H

CROP NAME:

4. What strategy did you use to decide to apply **HERBICIDES** to [crop]?
[Enter first code that applies.]

- | | |
|---|---|
| 1 | WEED PROBLEMS IN PREVIOUS YEARS (or schedule) |
| 2 | BASED ON EXTENT OF INFESTATION |
| 3 | FIELD MAPPING, COMPUTERIZED PROGRAM |
| 8 | OTHER [SPECIFY _____] |
| 9 | DID NOT APPLY HERBICIDES |

CODE

518

5. What strategy did you use to decide to apply **FUNGICIDES** to [crop]?
[Enter first code that applies.]

- | | |
|---|--|
| 1 | PROBLEMS IN PREVIOUS YEARS (or schedule) |
| 6 | BASED ON WEATHER FACTORS |
| 7 | BASED ON DISEASE FORECASTING SYSTEM |
| 8 | OTHER [SPECIFY _____] |
| 9 | DID NOT APPLY FUNGICIDES |

519

6. Was protection of naturally occurring beneficial organisms a factor in your pest control decisions for [crop]?
(Exclude bees)

520

☐ **YES** - [Enter code 1 and continue.] ☐ **NO** - [Go to item 6b.]

- a. How do you protect beneficial organisms?
[Enter up to 3 applicable codes.]

- | | |
|---|---|
| 1 | REDUCE PESTICIDE APPLICATION RATES |
| 2 | REDUCE PESTICIDE APPLICATION FREQUENCIES |
| 3 | CHOOSE PESTICIDES THAT ARE LESS HARMFUL TO BENEFICIAL ORGANISMS |
| 8 | OTHER [DESCRIBE _____] |

521

522

523

YEARS

- (1) How many years have you been protecting beneficial organisms for [crop]?

524

- b. Did you use any beneficial organisms to control (weeds, insects or diseases) for [crop]?

☐ **YES** - [Enter code 1 and continue.]

☐ **NO** - [Go to item 7.]

WEEDS INSECTS DISEASES

525

526

527

CODE

- (1) How many **years** have you been using beneficial organisms to control (weeds, insects or diseases) for [crop]?

YEARS

WEEDS INSECTS DISEASES

528

529

530

H *PEST MANAGEMENT PRACTICES*

H

6. Continued--

CROP NAME:

- c. What beneficial insects or organisms did you use on [crop]?
[List the beneficial insect(s) or organism(s).]

OFFICE USE

531

532

533

7. Did you use pheromones on [crop]--

- a. to monitor pests by trapping?

☐ YES - [Enter code 1.]☐ NO

CODE

534

- b. to control pests by disrupting mating?

☐ YES - [Enter code 1.]☐ NO

535

- c. [Ask only if item 7a or 7b was yes.]

How many years have you been using pheromones on [crop]?

YEARS

536

- d. What insect pest(s) were targeted with the pheromones?

[List the insect pest(s).]

OFFICE USE

537

538

539

8. Did you use any water management practices designed to combat (weeds, insects or diseases) for [crop]?

☐ YES - [Enter code 1 and continue.]☐ NO CODE

WEEDS

INSECTS

DISEASES

540

541

542

9. Do you alternate the pesticides used on [crop] to slow development of (weed, insect or disease) resistance?
(Use pesticides with different active ingredients.)

☐ YES - [Enter code 1 and continue.]☐ NO

WEEDS

INSECTS

DISEASES

543

544

545

10. Did you have soil biological testing done to help control (insects or diseases) for [crop]?

☐ YES - [Enter code 1 and continue.]☐ NO

INSECTS

DISEASES

546

547

11. Did you consider (insect or disease) resistance when selecting which [crop] rootstock varieties to plant?

☐ YES - [Enter code 1 and continue.]☐ NO

INSECTS

DISEASES

548

549

12. Did you utilize pruning specifically as a pest control for (insects or diseases) on [crop]?

☐ YES - [Enter code 1 and continue.]☐ NO

INSECTS

DISEASES

550

551

13. Did you remove drops, rotting fruit and/or debris in order to control (insects or diseases) on [crop]?

☐ YES - [Enter code 1 and continue.]☐ NO

INSECTS

DISEASES

552

553

J

ORGANIC PRACTICES

J

CROP NAME:

14. Did you choose planting locations for other crops to help control (weeds, insects or diseases) on [crop]?

☐ YES - [Enter code 1 and continue.] ☐ NO

15. Did you use practices such as tillage, mowing and chopping in order to control (weeds, insects or diseases) on [crop]?

☐ YES - [Enter code 1 and continue.] ☐ NO

16. Did you do anything else besides pesticide applications to control (weeds, insects or diseases) on [crop] this year?

☐ YES - [Enter code 1 and continue.] ☐ NO

a. What did you do? [Record responses below.]

17. Of the following, which sources did you use for (weed, insect or disease) control information for the selected [main target fruit crop]?

PEST CONTROL INFORMATION SOURCES

- ☐ 2 Commercial Scouting Service
- ☐ 3 Crop Consultant or Pest Control Advisor
- ☐ 4 Extension Advisor/Publications
- ☐ 5 Electronic Information Services (World Wide Web, DTN, etc.)
- ☐ 6 Farm Supply or Chemical Dealer
- ☐ 7 Grower Associations
- ☐ 8 Newsletter or Trade Magazines
- ☐ 9 Organic Certifying Agent
- ☐ 10 Other Growers
- ☐ 11 Processor
- ☐ 12 Special Events or Demonstration Projects
- ☐ 13 Television or Radio Programs, Newspapers
- ☐ 14 Other
- ☐ 15 None

- a. From the PEST CONTROL INFORMATION SOURCES, which source did you consider as the most important for (weed, insect or disease) control information for [main target fruit crop]? [Enter code(s) (2-15) from table above.]

WEEDS	INSECTS	DISEASES
554	555	556

WEEDS	INSECTS	DISEASES
557	558	559

WEEDS	INSECTS	DISEASES
560	561	562

OFFICE USE		
WEEDS	INSECTS	DISEASES
563	566	569
564	567	570
565	568	571

[If checked, enter code 1 in the appropriate boxes below.]

WEEDS	INSECTS	DISEASES
572	586	600
573	587	601
574	588	602
575	589	603
576	590	604
577	591	605
578	592	606
579	593	607
580	594	608
581	595	609
582	596	610
583	597	611
584	598	612
585	599	613

WEEDS	INSECTS	DISEASES
614	615	616

OFFICE USE

500

*J***ORGANIC PRACTICES***J*

[Complete this section only if the respondent reported organic acres in Section B, (column 6). Record the crop name and enter the crop code for respondent's main organic crop (in terms of bearing acres). If no organic crop was reported, go to Section K, page 18.]

CROP NAME

801

CROP CODE**YEAR**

1. What year did you become a certified organic grower of [crop]?

[Enter last two digits of year.]

802

2. During the 1997 crop year, did you--

- a. use any composted manure on the organic [crop] acres?
(Include composted manure produced on any farming/ranching operation.)

CODE

☐ **YES** - [Enter code 1 and continue.] ☐ **NO**

803

- b. use any composted plant material on the organic [crop] acres?
(Include compost produced on any farming/ranching operation.
Exclude manure.)

☐ **YES** - [Enter code 1 and continue.] ☐ **NO**

804

- c. plant legume crops as ground cover on organic [crop] acres to
increase available soil nitrogen?

☐ **YES** - [Enter code 1 and continue.] ☐ **NO**

805

3. Did you apply any other materials to the organic [crop] acres to build
soil structure and fertility?

☐ **YES** - [Continue.] ☐ **NO** - [Go to item 4.]

- a. What specific materials did you apply?
(Include mined minerals, animal and fish by-products and humates.)

OFFICE USE

806
807
808

J

ORGANIC PRACTICES

J

4. Did you use botanical insecticides on your organic [crop] acres?

CROP NAME

☐ **YES** - [Check all that apply.]

☐ **NO** - [Go to item 5.]

		CODE
<input type="checkbox"/> QUASSIA	[If checked, enter code 1.]	809
<input type="checkbox"/> PYRETHRUM	[If checked, enter code 1.]	810
<input type="checkbox"/> ROTENONE	[If checked, enter code 1.]	811
<input type="checkbox"/> RYANIA	[If checked, enter code 1.]	812
<input type="checkbox"/> SABADILLA	[If checked, enter code 1.]	813
<input type="checkbox"/> NEEM	[If checked, enter code 1.]	814

5. Did you use--

a. bacterial pathogens (*Bt*) for insect control?

☐ **YES** - [Enter code 1 and continue.] ☐ **NO**

815

b. viral pathogens (*Granulosis virus*) for insect control?

☐ **YES** - [Enter code 1 and continue.] ☐ **NO**

816

6. Did you--

a. use pheromones to disrupt insect mating?

☐ **YES** - [Enter code 1 and continue.] ☐ **NO**

817

b. plant trap crops for insect control?

☐ **YES** - [Enter code 1 and continue.] ☐ **NO**

818

7. What other materials did you use for insect control?

[Check all that apply.]

<input type="checkbox"/> DORMANT/SUMMER SUFFOCATING OILS	[If checked, enter code 1.]	819
<input type="checkbox"/> INSECTICIDAL SOAPS	[If checked, enter code 1.]	820
<input type="checkbox"/> OTHER (Specify _____)	[If checked, enter code 1.]	821

8. Did you--

a. plant crops to establish habitats for beneficial insects?

☐ **YES** - [Enter code 1 and continue.] ☐ **NO**

822

b. purchase and release beneficial parasites or predatory insects, mites and/or nematodes to help control insects?

☐ **YES** - [Enter code 1 and continue.] ☐ **NO**

823

*J***ORGANIC PRACTICES***J*

9. Did you--

CROP NAME

	WEEDS	INSECTS	DISEASES
	CODE	CODE	CODE
a. scout for [column]? [YES = 1]	858	859	860
b. plant ground cover as living mulch to help control [column]? [YES = 1]	824	828	835
c. plant ground cover to be incorporated into the soil to help control [column]? [YES = 1]	825	829	836
d. use other mulch materials to help control [column]? [YES = 1]	826	830	837
e. use mechanical tillage practices to help control [column]? [YES = 1]	827	831	838
f. select [column] - resistant varieties of [crop] to grow organically? [YES = 1]		832	839
g. have soil biological testing done to help control [column]? [YES = 1]		833	840
h. have leaf analyses done to help control [column]? [YES = 1]		834	841

10. What materials did you apply for disease control?

(Enter code for all that apply.)

	CODE
<input type="checkbox"/> SULFUR [If checked, enter code 1.]	842
<input type="checkbox"/> ANTIBIOTICS [If checked, enter code 1.]	843
<input type="checkbox"/> COPPER SULFATE [If checked, enter code 1.]	844
<input type="checkbox"/> COPPER HYDROXIDE [If checked, enter code 1.]	845
<input type="checkbox"/> OTHER (Specify _____) [If checked, enter code 1.]	846

OFFICE USE

847

*J***ORGANIC PRACTICES***J*

CROP NAME

11. Did you use any other cultural techniques to control weeds, insects or diseases on your organic [*crop*] acres?

☐ **YES** - [Enter code 1 and continue.] ☐ **NO** - [Go to item 12.]

CODE

848

a. What did you do?

[Record
responses.]

OFFICE USE

849

850

851

12. Did you use any other cultural techniques to control animals and birds on your organic [*crop*] acres?

☐ **YES** - [Enter code 1 and continue.] ☐ **NO** - [Go to item 13.]

CODE

852

a. What did you do?

[Record
responses.]

OFFICE USE

853

854

855

13. Of the following, which source did you use most for pest control information for your organic [*crop*]?

- 1 **COMMERCIAL SCOUTING SERVICE**
- 2 **CROP CONSULTANT or PEST CONTROL ADVISOR**
- 3 **EXTENSION ADVISOR/PUBLICATIONS**
- 4 **FARM SUPPLY or CHEMICAL DEALER**
- 5 **GROWER ASSOCIATIONS**
- 6 **NEWSLETTERS or TRADE MAGAZINES**
- 7 **ORGANIC CERTIFYING AGENT**
- 8 **OTHER GROWERS**
- 9 **PROCESSOR**
- 10 **SPECIAL EVENTS or DEMONSTRATIONS, TELEVISION or RADIO PROGRAMS, NEWSPAPERS**
- 11 **NONE**

CODE

856

14. What marketing channel did you use most for sales of your organic [*crop*] sold **TO** or **THROUGH**--

- 1 **DIRECT TO CONSUMERS?** (roadside stands, farmers markets, etc.)
- 2 **DIRECT TO NATURAL FOOD RETAILERS?**
- 3 **A GROCERY RETAILER?**
- 4 **A BROKER, PACKER OR SHIPPER?**
- 5 **A GROWER COOPERATIVE?**
- 6 **A PROCESSOR?**
- 7 **A GROCERY CHAIN DISTRIBUTOR?** (Safeway, Kroger, Giant, etc.)
- 8 **OTHER GROCERY WHOLESALERS OR DISTRIBUTORS?**
- 9 **ANY OTHER MARKET?**

857

K**OPERATOR CHARACTERISTICS****K**

1. How many years have you (the operator) been operating a farm/ranch?	YEARS <div style="border: 1px solid black; padding: 2px; width: 100px; margin: 0 auto;">040</div>
2. Did you (the operator) grow up on a farm/ranch? <input type="checkbox"/> YES - [Enter code 1.] <input type="checkbox"/> NO	CODE <div style="border: 1px solid black; padding: 2px; width: 100px; margin: 0 auto;">041</div>
3. How much formal education do you (the operator) have?	<div style="border: 1px solid black; padding: 5px; width: 250px; margin: 0 auto;"> 1 LESS THAN HIGH SCHOOL 2 COMPLETED HIGH SCHOOL 3 VOCATIONAL TRAINING AFTER HIGH SCHOOL 4 SOME COLLEGE 5 COMPLETED COLLEGE 6 GRADUATE SCHOOL </div> <div style="border: 1px solid black; padding: 2px; width: 100px; margin: 0 auto;">042</div>
4. What was your (the operator's) age on your last birthday?	YEARS <div style="border: 1px solid black; padding: 2px; width: 100px; margin: 0 auto;">043</div>
5. What is your (the operator's) primary occupation?	<div style="border: 1px solid black; padding: 5px; width: 250px; margin: 0 auto;"> 1 FARM OPERATOR/GROWER 2 HIRED FARM MANAGER 3 NON-FARM WORK </div> <div style="border: 1px solid black; padding: 2px; width: 100px; margin: 0 auto;">044</div>
6. During 1997, will or did you (the operator) work off this operation for wages or a salary? (Include proprietorship of any off-farm business.) <input type="checkbox"/> YES - [Enter code 1.] <input type="checkbox"/> NO - [Go to item 7.]	<div style="border: 1px solid black; padding: 2px; width: 100px; margin: 0 auto;">045</div>
a. How many days did you (the operator) work (or will work) off the farm for wages or a salary?	<div style="border: 1px solid black; padding: 5px; width: 200px; margin: 0 auto;"> 1 1 - 49 DAYS 2 50 - 99 DAYS 3 100 - 199 DAYS 4 200 OR MORE DAYS </div> <div style="border: 1px solid black; padding: 2px; width: 100px; margin: 0 auto;">046</div>
7. During 1997, will or did your (the operator's) spouse work off this operation for wages or a salary? (Include proprietorship of any off-farm business.) <input type="checkbox"/> YES - [Enter code 1.] <input type="checkbox"/> NO - [Go to item 8.]	<div style="border: 1px solid black; padding: 2px; width: 100px; margin: 0 auto;">047</div>
a. How many days did your (the operator's) spouse work (or will work) off the farm for wages or a salary?	<div style="border: 1px solid black; padding: 5px; width: 200px; margin: 0 auto;"> 1 1 - 49 DAYS 2 50 - 99 DAYS 3 100 - 199 DAYS 4 200 OR MORE DAYS </div> <div style="border: 1px solid black; padding: 2px; width: 100px; margin: 0 auto;">048</div>
8. In the past year, have you gone to courses (<i>dealer promotions, planned field days, etc.</i>) on agricultural production techniques or management, not including those required for holding a certified applicator license? <input type="checkbox"/> YES - [Enter code 1.] <input type="checkbox"/> NO	<div style="border: 1px solid black; padding: 2px; width: 100px; margin: 0 auto;">049</div>

9. Now I would like to classify the total acres operated in terms of total gross value of sales.
[Be sure sales represent only **1996** and earlier years' production from acres operated.]

Considering--

- all crops sold in 1996,
- all livestock, poultry (including commercial broilers), and products (milk, eggs, etc.) sold in 1996,
- all sales produced under contract for 1996 crops, livestock or poultry,
- all sales of any miscellaneous agricultural products in 1996,
- all government payments received in 1996,
- landlord's share of government payments and crops sold in 1996;

What code represents the total gross value of sales?

- ☐ 1 Less than \$1,000
- ☐ 2 \$ 1,000 -- \$ 2,499
- ☐ 3 \$ 2,500 -- \$ 4,999
- ☐ 4 \$ 5,000 -- \$ 9,999
- ☐ 5 \$ 10,000 -- \$ 19,999
- ☐ 6 \$ 20,000 -- \$ 24,999
- ☐ 7 \$ 25,000 -- \$ 39,999
- ☐ 8 \$ 40,000 -- \$ 49,999
- ☐ 9 \$ 50,000 -- \$ 99,999
- ☐ 10 \$ 100,000 -- \$ 249,999
- ☐ 11 \$ 250,000 -- \$ 499,999
- ☐ 12 \$ 500,000 and over

[Enter code.]

050

10. Of the farm income reported, which of these categories represents the largest portion of the gross income from the operation?

- 1 **GRAINS and OILSEEDS** (corn, dry beans, dry peas, flaxseed, grain silage and forage, grains and oilseeds for seed, popcorn, rice, small grains, sorghum, soybeans, sunflowers)
- 2 **TOBACCO**
- 3 **COTTON**
- 4 **VEGETABLES and MELONS** (beets, cabbage, cantaloupes, potatoes, pumpkins, sweetcorn, sweet potatoes, tomatoes, watermelons, vegetable seed and others)
- 5 **FRUIT, TREE NUTS and BERRIES** (almonds, apples, blueberries, cherries, grapes, hazelnuts, kiwifruit, oranges, pears, pecans, strawberries, walnuts and others)
- 6 **NURSERY, GREENHOUSE and FLORICULTURE** (bedding plants, bulbs, Christmas trees, cut flowers, flower seed, foliage plants, mushrooms, nursery stock, potted plants, shrubbery, sod and others.)
- 7 **OTHER CROPS** (grass seed, hay, hops, maple, mint, peanuts, sugarcane, sugarbeets.)
- 8 **BEEF CATTLE** (beef cattle for breeding stock, fed cattle, stockers and feeders, veal calves)
- 9 **DAIRY** (milk and other dairy products, sales of dairy animals)
- 10 **HOGS**
- 11 **SHEEP, GOATS, WOOL and MOHAIR**
- 12 **EQUINE** (burros, donkeys, horses, mules, ponies)
- 13 **POULTRY and EGGS** (broilers, chickens, ducks, eggs, geese, hatcheries, pheasants, poultry products, turkeys)
- 14 **AQUACULTURE** (catfish, trout and other finfish, and shellfish)
- 15 **OTHER ANIMALS** (bees, honey, fur-bearing animals, rabbits, and other animal specialties)

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10
- ☐ 11
- ☐ 12
- ☐ 13
- ☐ 14
- ☐ 15

ENTER CODE

051

OFFICE USE

052

SURVEY PUBLICATIONS

1. The results of this survey will be published in the summer of 1998.
Would you like to receive a free copy?

CODE

060

☐ YES - [Enter code 1.]

☐ NO

LOCATION

2. **[ENUMERATOR ACTION:** Mark the map to indicate the area where the largest amount of the respondent's target fruit is produced. Then record the name of the county in which this production is grown. Be sure the "X" you mark on the map is in this county.]

COUNTY FIPS CODE

061

County Name _____

[Thank the respondent then review this questionnaire.]**RECORDS USE**

Did respondent use farm/ranch records to report chemical data?

☐**YES** - [Enter code 1.]☐**NO**

CODE

062

064

[ENUMERATOR NOTE: This should be done by observation. What is the gender of the operator?]1
2**MALE**
FEMALE**ENDING TIME [MILITARY]**

065

**OFFICE USE -
TIME IN HOURS**

066

SUPPLEMENTS USED

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

**CHEMICAL
SUPPLEMENTS**

NUMBER

068

RESPONDENT1 **OPERATOR/MANAGER OR PARTNER**
2 **SPOUSE**
3 **OTHER**

CODE

069

Respondent's name (if other than operator or spouse)

(Phone) _____

ENUMERATOR

ENUMERATOR ID

070

MM DD YY

DATE

071

__ / __ / 97

EVALUATION

072

[ENUMERATOR NOTE: If other people (custom applicators, contractors, etc.) were contacted for assistance in completing this questionnaire, please record their names and phone numbers below.]_____
