

Fruit Chemical Use Survey



United States Department of Agriculture
National Agricultural Statistics Department
Southern Plains Regional Field Office



Fruit Chemical Use Survey

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Fruit Chemical Use Secondary Coordinator: Kenzie Taylor

Fruit Chemical Use Survey

Primary objective is to provide timely, reliable, detailed data to develop an agricultural chemical use database, and for analysis of pesticide usage and pest management practices of target fruit crop in selected states.



Reasons to Respond

- EPA needs actual usage data for re-registration of these chemical products important to producers
- Respondents completing the survey will be offered one Continuing Education Unit toward their pesticide applicator's license by TX Department of Agriculture.

Reasons to Respond

- Survey results are included in USDA's pesticide data program (PDP) used to evaluate the safety of the nation's food supply, potential human exposure to pesticide residues, and water quality issues.
- Growers show how they manage chemical usage in a responsible way: their actual usage vs. maximum label rates applied to total acres (used in lieu of reported usage for a product).
- Results document producer practices after implementation of the Food Safety Modernization Act of 2011.

Survey Data Users Include:

- EPA, AMS, ERS, other gov't agencies
- Produce industry (growers, processors)
- Educational and research institutions
- Policy-makers
- Businesses involved with food industry
- Consumers

Fruit Chemical Data Use

- In decisions about re-registration of chemical products used in agriculture
- To meet the legislative mandate of the Food Quality Protection Act.
- State level FCUS estimates are used to address water quality and food safety issues.
- In private sector for making decisions about chemical use in U.S. agriculture.

Survey Procedures

- Project code is 141
- 12 states are conducting this survey
- Texas sample size is 97
- Texas will survey only Grapefruit

Survey Procedures

- Survey covers: 2023 Crop Year
 - begins after 2022 fruit crop harvest through end of 2023 fruit crop harvest on the target operation
 - Grapefruit harvest range: November – March
- Changes from last time (2021)
 - Fertilizer section included

Respondent Packet Contents

- What has the respondent received?
 - Information Copy of Questionnaire
 - Respondent Booklet
 - Pre-Survey Letter

Survey Data To Be Collected

1. Fruit acreage – grapefruit
2. Fertilizer applications
3. Pesticide applications
4. Pest management practices

Questionnaire Sections

Screening Questions

A: **Land Operated** -- *only land in US for this operation*

B: **Fruit Acreage** – *Grapefruit*

C: *Fertilizer Applications – Grapefruit*

D: **Pesticide Applications** – *Grapefruit*

E: **Pest Management Practices** – *Total Fruit acres on operation*

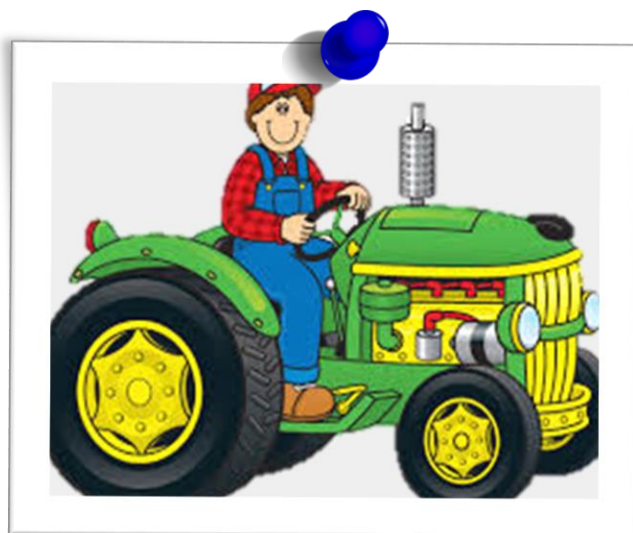
Conclusion

Questionnaire Sections

Question:

- *If the respondent says he does not use pesticides, can you skip to the conclusion?*
 - No. Pest Management Practices (Section E) applies to everyone, regardless of pesticide use.
 - Ask about non-restricted-use pesticides.

Questionnaire Review



Questionnaire Face Page

2023 FRUIT CHEMICAL USE SURVEY

Barcode



State Poid

48 300000000 01 01 0 188

Phone #

(512) 999-1234

STR 1 685
97 215

Name/Address

IMA FARMER
1234 RURAL ROAD
ANYTOWN, TX 56789-1234

48999 48997

Sup Enum

OMB No. 0535-0218
Approval Expires: 6/30/2026
Project Code: 141
SurveyID: 1241

Project Code 141



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ENTERPRISE

VERSION 01	POID _____	SUBTRACT _____
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CONTACT RECORD

DATE	TIME	NOTES

Questionnaire Face Page

The information you provide will be used for statistical purposes only. Your response will be kept confidential and any person who willfully discloses ANY identifiable information about you or your operation is subject to a jail term, a fine, or both. This survey is conducted in accordance with the Confidential Information Protection and Statistical Efficiency Act of 2018, Title III of Pub. L. No. 115-435, codified in 44 U.S.C. Ch. 35 and other applicable Federal laws. For more information on how we protect your information please visit: <https://www.nass.usda.gov/confidentiality>. Response is voluntary.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB number is 0535-0218. The time required to complete this information collection is estimated to average 45 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

BEGINNING TIME [MILITARY]

H H M M
004
1 3 3 0

☒ Name, address, and partners verified and updated if necessary.

1. During 2023, 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 2] ☐ No – [Continue]
2. During 2023, 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 2] ☐ No – [Continue]
3. During 2023, 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 2] ☐ No – [Continue]
4. During 2023, did this operation have any fruit acres which were operated by a management firm? ☐ Yes – [Go to item 1, page 2] ☐ No – [Go to page 4]

Remember to
use a 24-hour
time format

Screening

2

SCREENING

1. Did this operation have any of the target crops during the 2023 crop year? [See page 3 for target crops.]

☐ Yes – [Continue]

☐ No – [Write notes explaining the situation then go to "Conclusion" on back page.]

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

☐ one individual? [Go to Section A]

☐ a hired manager? [Go to Section A]

☐ partners? [Continue]

3. How many individuals are involved in the day-to-day decisions of this operation? [Enter the number of partners, including the partner named on the label. Identify the other persons in this partnership below, then go to Section A. Partners jointly operate land and share in decision making. Do not include landlords and tenants as partners].....

Number

Partners: POID _____	Partners: POID _____
PARTNER NAME	PARTNER NAME
ADDRESS	ADDRESS
CITY STATE ZIP PHONE NUMBER	CITY STATE ZIP PHONE NUMBER
Partners: POID _____	POID _____
PARTNER NAME	PARTNER NAME
ADDRESS	ADDRESS
CITY STATE ZIP PHONE NUMBER	CITY STATE ZIP PHONE NUMBER

Remember: Abandoned or lost crops should still answer "Yes" to this screening question! We want to know about any chemicals they applied regardless of harvest.

Provide information describing why "No target crops". Note if crop is for home use only.

Follow skip patterns and verify boxes are checked properly.

Cell will contain number only if "Partners" box is checked.

Change in Operator Status

4

CHANGE IN OPERATOR STATUS

[Enumerator Note: Skip this section if there is no change in operation name or operator.]

1. Has there been a change in operation name or operator?.....

Code	
Yes=1	023
No=3	

[If item 1 = 1, complete name and address information below for new operator and continue.
If item 1 = 3, go to Enumerator Note below.]

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

[Enumerator Note: If the operation on the face page was in business part of the 2023 crop year, complete this questionnaire for the part of the year during which the operation did business, unless the operation has been taken over by a new operator. If the operator has changed midyear, please conduct this interview start to finish with the new operator after reading "Valid Substitution" rules in section 4 of the Interviewer's Manual.]

2. Has the operation printed on this questionnaire been combined or merged with any other farming operations?

- ☐ Yes – [Go to "Conclusion"]
☐ No – [Continue]

*** Skip this section if there's NO change in operation name or operator.**

If there is a change, determine if substitution is allowed.

Change in Operator Status

Substitution Rules

- Substitution Allowed:
 - New operator can report all chemical data for the entire calendar year of 2023
- AND
- Operation was not merged or combined with any other operation
- Substitution Not Allowed:
 - Another existing operation was combined with our target operation.

Section A: Land Operated



Section A: Land Operated

- Record all acreage that this operation owns, rents, or rents out.
- **Land operated in other states should be included (ONLY IF) farmer makes day to day decisions for that land.**
- Add $1a + 1b - 1c = \text{Total Acres operated}$

IM pages 501-506

Section A: Land Operated

5

A	LAND OPERATED	A
Acres Operated		
1. How many acres does this operation--		Acres
a. own?.....	+	901 700.0
b. rent or lease from others or use rent free? EXCLUDE land used on an animal unit month (AUM) basis.....	+	902 200.0
c. rent to others?.....	-	905 100.0
2. Then the total acres operated are: [item 1a + 1b - 1c].....	=	900 800.0
a. Does this include the farmstead, all cropland, woodland, pastureland, wasteland, and government program land?		
<input type="checkbox"/> Yes - [Continue]		
<input type="checkbox"/> 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? INCLUDE land in hay, summer fallow, cropland idle, cropland used for pasture and cropland in government programs.....		802 750.0
4. Of the total acres operated, how many acres are in fruit? INCLUDE bearing and non-bearing acreage in trees, vineyards and bushes.....		803 400.0

Section B: Fruit Acreage

IM Pages 507- 513

Section B: Fruit Acreage

- The purpose of this section is to obtain the number of bearing acres of each of the **target fruit crops**.
- Do not collect acreage or pesticide data for any fruit crops or acres for operations other than the target operation.

IM pages 507-513

Texas:

320	Grapefruit
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Section B: Fruit Acreage

6

B FRUIT ACREAGE B					
1. What target fruit crops were on these [Section A, item 4] acres during the 2023 crop year?					
EXCLUDE					
<ul style="list-style-type: none"> new plantings other plantings which are not yet bearing 					
LINE	1 Crop	2 Crop Code	3 How many bearing acres of [crop] did this operation have? Acres	4 Were any commercial fertilizers applied to this crop? Yes = 1 No = 3	5 Were any herbicides, insecticides, fungicides, etc. applied to this crop? Yes = 1 No = 3
01	Grapefruit	320	11 160.0	12 1	13 1
02			11 .	12	13
03			11 .	12	13
04			11 .	12	13
05			11 .	12	13
06			11 .	12	13
07			11 .	12	13
08			11 .	12	13
09			11 .	12	13
10			11 .	12	13
11			11 .	12	13
12			11 .	12	13
13			11 .	12	13
14			11 .	12	13

Table 001

Office Use
Lines in Table

Line 99 199

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 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 2022 if they were part of the 2023 crop.

EXCLUDE

- All crops grown in another state.
- Non-commercial orchard and vineyard acreage (home garden).
- Non-target fruit.
- 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.

- Column 1 – Crop name
- Column 2 – Crop code
- Column 3 – Bearing acres of crop on operation
- Column 4 – Fertilizer Applied
- Column 5 – Pesticide Applied

Section C: Fertilizer Applications

Section C: Fertilizer Applications

- Column 1 – Crop Name
 - Record the name of the target crop to which the operation applied commercial fertilizers during the 2023 crop year.
- Column 2 – Crop Code
 - Refer to Column 2 in the Section B table for the target crop code
- IM page 513

Section C: Fertilizer Applications

- Columns 3-6 Nitrogen (N), Phosphate (P_2O_5), Potash (K_2O) & Sulfur (S)
 - Record the plant nutrients [Nitrogen (N), Phosphate (P_2O_5), Potash (K_2O) & Sulfur (S)] of each fertilizer material applied to the selected target commodity field. These nutrients can be reported in either two ways:
 - Percent Analysis: this is the percentage composition of the product expressed in terms that the law requires and permits
 - Pounds of actual nutrients: use pounds of actual plant nutrients in absolutely necessary.
- IM Pages 513-516

Section C: Fertilizer Applications

- Column 7 – Quantity Applied Per Acre
 - Leave this column blank if actual nutrients were reported. If pounds, gallons, quarts or ounces were reported, record the amount used per acre.
- Column 8 – Unit Codes
 - Units which the respondent may report are listed
 - Ex: Gallons reported, enter code 12
 - Ex: Quarts reported, enter code 13
- IM Page 517

Section C: Fertilizer Applications

- Column 9 – Acres Applied
 - Record the total number of acres receiving the reported fertilizer application. Record treated acres, which is the actual land acres treated with fertilizer.
- Column 10 – Number of Times Applied
 - If more than one application of the same fertilizer material, with the same quantity user per acre for each application, was made to the same acres, account for this in Column 10.
- IM Page 517

C

FERTILIZER APPLICATIONS

C

Enumerator Note—

If column 4 of the table in Section B is Yes for any crops, continue with item 1.
If column 4 of the table in Section B is No for all crops, go to Section D.

1. I need to record complete information on all commercial fertilizers applied to the bearing acres of target fruit grown during the 2023 crop year. INCLUDE all applications regardless of how they were applied such as irrigation water, foliar applications, etc. Record amount of an analysis of fertilizers applied or pounds of actual plant nutrients applied. Complete the table below and any necessary supplemental fertilizer tables. EXCLUDE micronutrients, lime, and gypsum.

Office Use

200

Office Use
Lines in Table

Table
001

299

LINE	1	2	3	4	5	6	7	8	9	10
	Crop	Crop Code	N NITROGEN	P PHOSPHATE	P POTASH	S SULFUR	How much was applied per acre per application? [Leave this column blank if actual nutrients were reported.]	Unit Codes 1 Pounds 12 Gallons 13 Quarts 15 Liquid Oz. 28 Dry Oz. 19 Actual Nutrients	How many acres was this applied to? [Include bearing acres only] Acres	How many times was it applied? Number
01	Grapefruit	320	31 6	32 4	33 0	34 0	36 1.5	37 1	40 8.0	41 1
02			31	32	33	34	36 .	37	40 .	41
03			31	32	33	34	36 .	37	40 .	41
04			31	32	33	34	36 .	37	40 .	41
05			31	32	33	34	36 .	37	40 .	41
06			31	32	33	34	36 .	37	40 .	41
07			31	32	33	34	36 .	37	40 .	41

If column 4 in section B is yes for any crop, continue, if No, then go to section D

Section D: Pesticide Applications



Section D: Pesticide Applications

- Record target crop name and the enter crop code (from page 3)
 - Grapefruit = 320
- **Please refer to your Respondent Booklet for correct product name & code**
- Record each product used on a separate line
- **Products not listed in the booklet, record at the bottom of the page**
- **IM pages 514-527**

Section D: Pesticide Applications

9

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 (2022) harvest, did you use herbicides on any of your bearing fruit acreage?..... ☐ Yes ☐ No
2. Since last year's (2022) harvest, did you use insecticides, nematocides, or miticide on any of your bearing fruit acreage?..... ☐ Yes ☐ No
3. Since last year's (2022) harvest, did you use any fungicides on any of your bearing fruit acreage?..... ☐ Yes ☐ No
4. Since last year's (2022) harvest, did you use any other chemicals such as chemical thinners, growth regulators, microbial agents, pheromones, rodenticides, etc. on any of your bearing fruit acreage?..... ☐ Yes ☐ No

[Enumerator Action: If all items 1 – 4 are No, go to Section E, page 12, otherwise continue.]

Section D: Pesticide Applications

- Columns 1 & 2 – Crop Name & Code
 - Record the crop name and code for each pesticide application. Each pesticide product must be recorded on a separate line, so you may have several lines for each crop receiving chemical applications.

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.]
Krovar I DF	01	Grapefruit	320	⁶¹ 41834	D	⁶³ -
Esteem 35 WP	02	Grapefruit	320	⁶¹ 10877	D	⁶³ -
Lorsban-4E	03	Grapefruit	320	⁶¹ 10983	L	⁶³ -
Vendex 50 WP	04	Grapefruit	320	⁶¹ 10197	D	⁶³ 4
Agri-Mek 0.15 EC	05	Grapefruit	320	⁶¹ 10405	L	⁶³ 4
Enable 2F	06	Grapefruit	320	⁶¹ 70611	L	⁶³ 6
GEM Plus	07	Grapefruit	320	⁶¹ -	D	⁶³ 6
Dormant Flowable Emulsion	08	Grapefruit	320	⁶¹ 11558	L	⁶³ 6

Section D: Pesticide Applications

- Column 3 – Product Code
 - Record the product code from the respondent booklet of the herbicide, insecticide, fungicide, etc., reported. Be sure to write the product code clearly.



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.]
Krovar I DF	01	Grapefruit	320	⁶¹ 41834	D	⁶³ -
Esteem 35 WP	02	Grapefruit	320	⁶¹ 10877	D	⁶³ -
Lorsban-4E	03	Grapefruit	320	⁶¹ 10983	L	⁶³ -
Vendex 50 WP	04	Grapefruit	320	⁶¹ 10197	D	⁶³ 4
Agri-Mek 0.15 EC	05	Grapefruit	320	⁶¹ 10405	L	⁶³ 4
Enable 2F	06	Grapefruit	320	⁶¹ 70611	L	⁶³ 6
GEM Plus	07	Grapefruit	320	⁶¹ -	D	⁶³ 6
Dormant Flowable Emulsion	08	Grapefruit	320	⁶¹ 11558	L	⁶³ 6

Section D: Pesticide Applications

- Column 4 – Liquid or Dry
 - Record and “L” or a “D” in this column to indicated in what form the product was **AT TIME OF PURCHASE.**



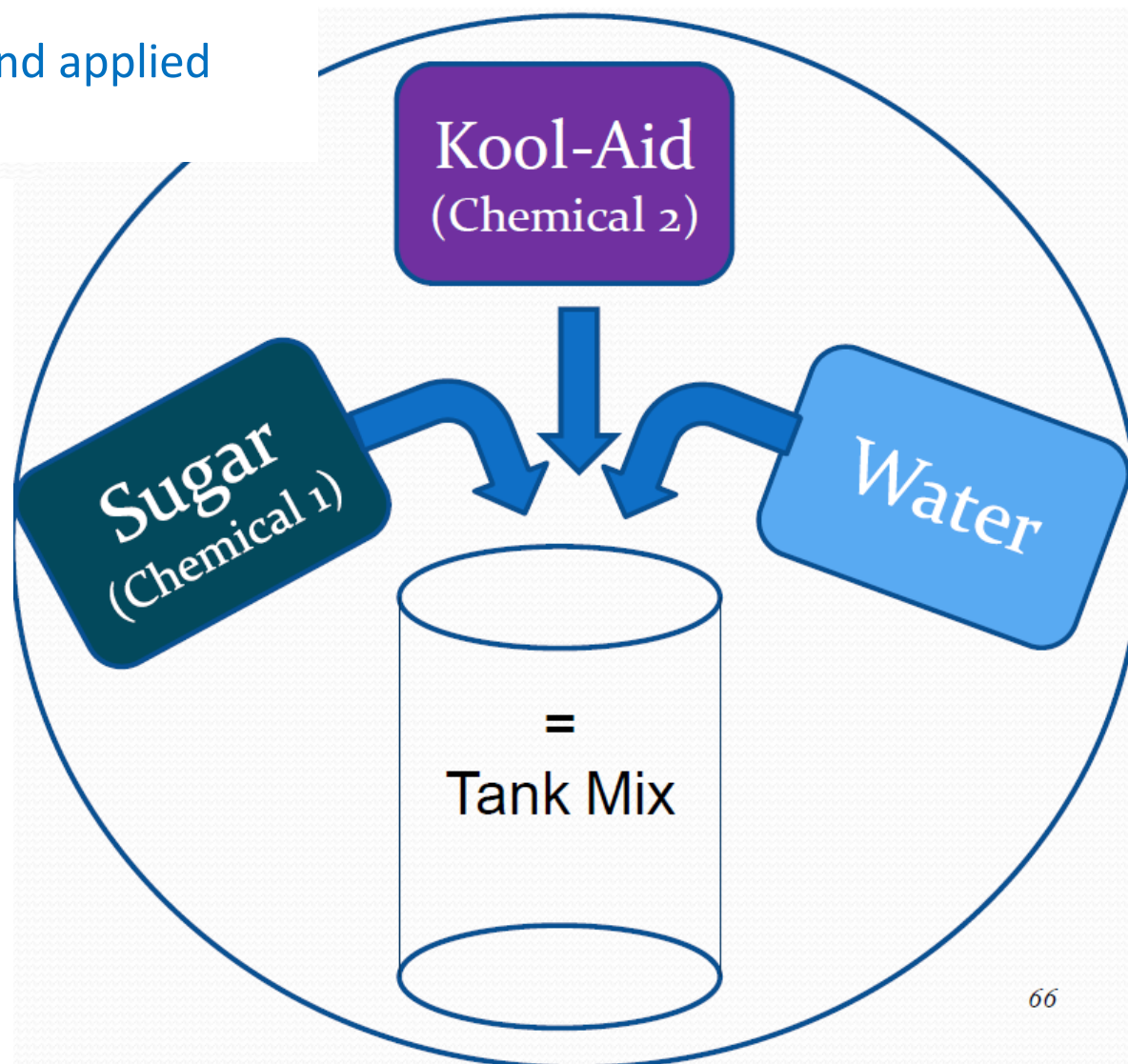
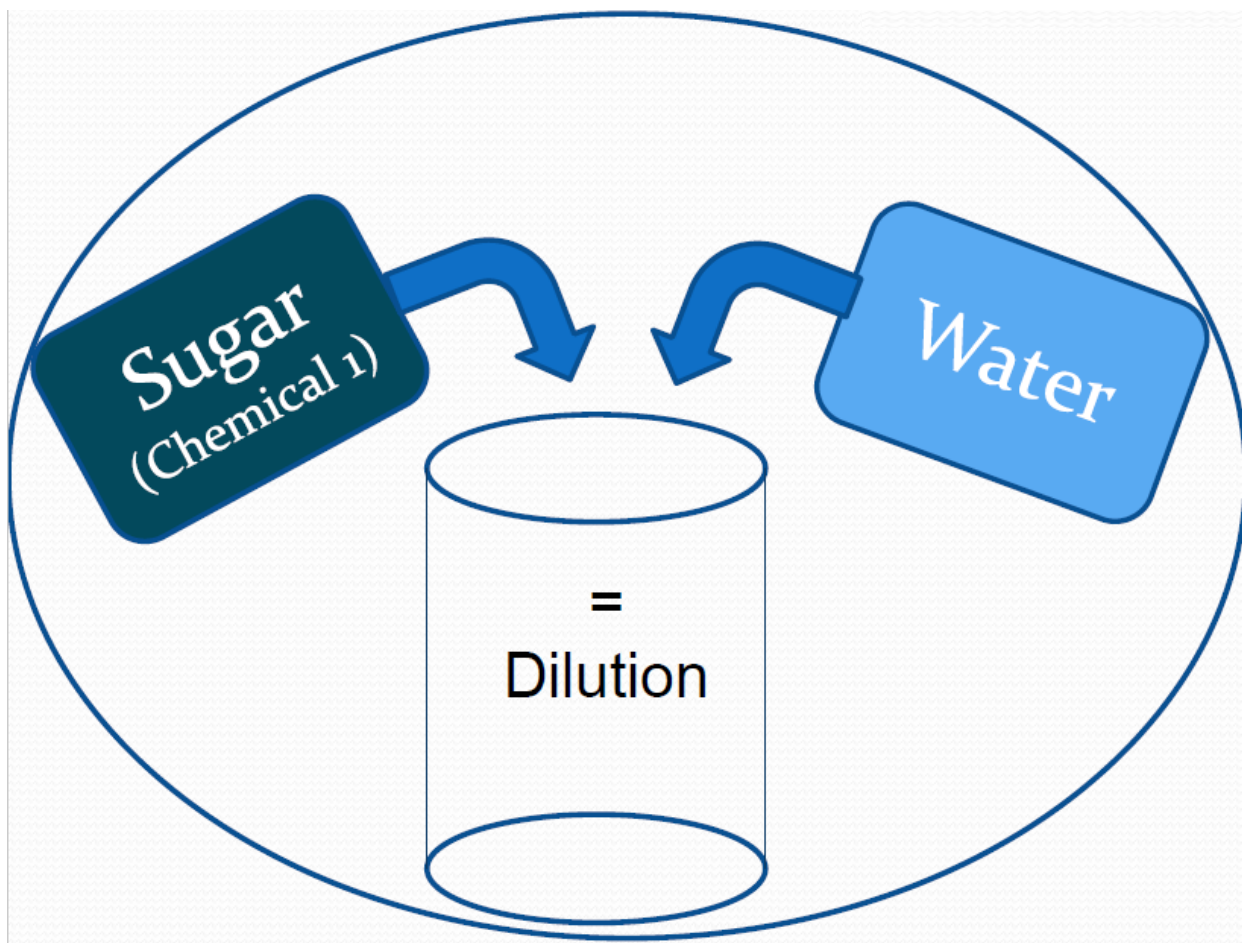
Chemical Product Name	L I N E	1 Crop	2 Crop Code	3 What products were applied to the [crop]? [Enter product code.]	4 Was this product bought in liquid or dry form? [Enter L or D.]	5 Was this part of a tank mix? [If tank mix, enter line number of first product in mix.]
Krovar I DF	01	Grapefruit	320	⁶¹ 41834	D	⁶³ -
Esteem 35 WP	02	Grapefruit	320	⁶¹ 10877	D	⁶³ -
Lorsban-4E	03	Grapefruit	320	⁶¹ 10983	L	⁶³ -
Vendex 50 WP	04	Grapefruit	320	⁶¹ 10197	D	⁶³ 4
Agri-Mek 0.15 EC	05	Grapefruit	320	⁶¹ 10405	L	⁶³ 4
Enable 2F	06	Grapefruit	320	⁶¹ 70611	L	⁶³ 6
GEM Plus	07	Grapefruit	320	⁶¹ -	D	⁶³ 6
Dormant Flowable Emulsion	08	Grapefruit	320	⁶¹ 11558	L	⁶³ 6

Section D: Pesticide Applications

- Column 5 – Tank Mix (Pages 522-527)
 - For products not applied as part of a tank mix, leave this column blank or put a dash.
 - Products applied in a tank mix (two or more products mixed in the tank by the farmer/custom applicator and applied together) must be identified on the questionnaire.
 - Target crop, acres applied, and times applied must all be the same.

Section D: Pesticide Applications

- What is a Tank Mix?
 - 2 or more products (Chemicals) mixed in one tank and applied together



Section D: Pesticide Applications

Tank Mixes

- Two items are in a single tank mix: Lines 4 and 5.
- Lines must be next to each other in the table.

Example 1
✓

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.]
Krovar I DF	01	Grapefruit	320	⁶¹ 41834	D	⁶³ -
Esteem 35 WP	02	Grapefruit	320	⁶¹ 10877	D	⁶³ -
Lorsban-4E	03	Grapefruit	320	⁶¹ 10983	L	⁶³ -
Vendex 50 WP	04	Grapefruit	320	⁶¹ 10197	D	⁶³ 4
Agri-Mek 0.15 EC	05	Grapefruit	320	⁶¹ 10405	L	⁶³ 4

Section D: Pesticide Applications

Tank Mixes

- What does this mean?

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.]
Krovar I DF	01	Grapefruit	320	⁶¹ 41834	D	⁶³ -
Esteem 35 WP	02	Grapefruit	320	⁶¹ 10877	D	⁶³ -
Lorsban-4E	03	Grapefruit	320	⁶¹ 10983	L	⁶³ -
Vendex 50 WP	04	Grapefruit	320	⁶¹ 10197	D	⁶³ 4
Agri-Mek 0.15 EC	05	Grapefruit	320	⁶¹ 10405	L	⁶³ 4
Enable 2F	06	Grapefruit	320	⁶¹ 70611	L	⁶³ 6
GEM Plus	07	Grapefruit	320	⁶¹ -	D	⁶³ 6
Dormant Flowable Emulsion	08	Grapefruit	320	⁶¹ 11558	L	⁶³ 6

Lines 4 & 5 were

- combined in the same tank
- applied to the same field
- at the same time

Lines 6, 7, & 8 were

- combined in the same tank
- applied to the same field
- at the same time

Example 2



Section D: Pesticide Applications

[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.
07	Fungicide	GEM Plus	Dry	3125-577

- Line number of associated pesticide application

- Pesticide type

- Trade name and formulation

- Liquid or dry before mixing?

- In the absence of a NASS Product Code, the EPA registration number is the next best thing.

Section D: Pesticide Applications

Reminder: If column 5 in section D is YES for target crop, continue, if NO, then go to section E

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: _____)

Office Use

300

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.]	9 What percent of the rows were covered with an airblast application?	10 How many acres were treated with this product? [INCLUDE bearing acres only.]	11 How many times was this product applied?
				Code	100 All Rows 50 Every Other Row — Other Percent	Bearing Acres	Number
01	65 _____		73 _____	74	75	77 _____	79

Either amount per acre
OR

Total amount rounded
to two decimals

Unit
code

% of rows
covered

Acres
applied

times
applied

Section D: Pesticide Applications

Supplements are required if more than 33 lines are needed

2023 FRUIT CHEMICAL USE SURVEY

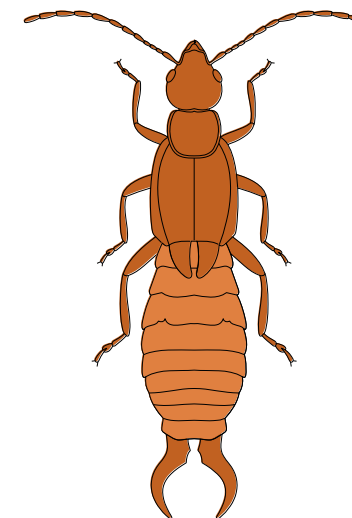
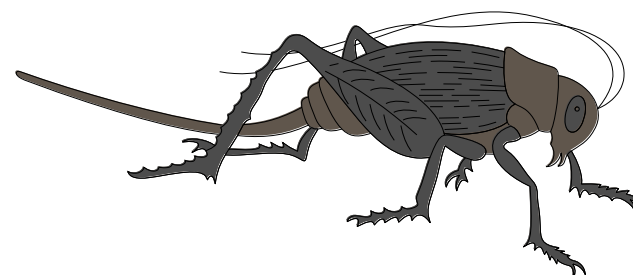
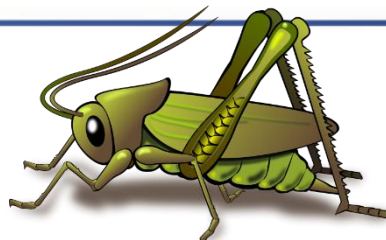
ENTERPRISE VERSION
ALL STATES EXCEPT CALIFORNIA

PESTICIDE APPLICATIONS TABLE
SUPPLEMENTS

2 PESTICIDE APPLICATIONS SUPPLEMENT						
VERSION 01		ID _____	SUBTRACT __	T-TYPE 3	TABLE __	
				LINES IN TABLE OFFICE USE	LINE 99	399
CHEMICAL PRODUCT NAME	L I N E	1 CROP	2 CROP CODE	3 What products were applied to the [crop]? [Enter product code.]	4 Was this product bought in liquid or dry form? [Enter L or D.]	5 Was this part of a tank mix? [If tank mix, enter line number of first product in mix.]
	01			61		63
	02			61		63
	03			61		63
	04			61		63

Other Resources:

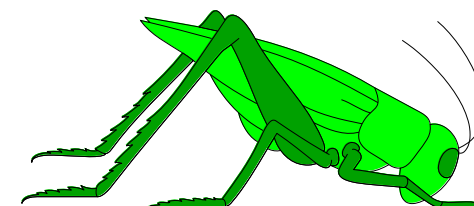
- EPA Product Label Search
 - <http://iaspub.epa.gov/apex/pesticides/f?p=PPLS:1>
- CDMS Product Label Database
 - <http://www.cdms.net/Label-Database>



Section E: Pest Management Practices



Page 528 IM



Section E: Pest Management Practices

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 5 on page 6?]

☐ Yes – [Continue] ☐ No – [Go to item 4]

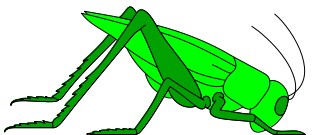
1. Was weather data used to assist in determining either the need or when to make pesticide applications?.....
2. Were any biological pesticides such as Bt (*Bacillus thuringiensis*), insect growth regulators, such as Courier, Intrepid, etc., Neem or other natural/biological based products sprayed or applied to manage pests?.....
3. Were pesticides with different mechanisms of action rotated or tank mixed for the primary purpose of keeping pests from becoming resistant to pesticides?.....

Code	
Yes=1	600
No=3	
Yes=1	601
No=3	
Yes=1	602
No=3	

4. In 2023, 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. [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 fruit acres were not scouted. [Enter code 3 and go to item 10.]

Code
608



- Pest management practices used on total fruit acres in 2023
- Pest management is used to control **insects, weeds, and diseases**
- Questions 1-3 relate to pesticide applications
- If **NO** pesticides applied on page 6, Column 4 then **skip to Question 4 in Section E**

Section E: Pest Management Practices

• Question 4 – How were fruit acres scouted?

- 1 – Deliberately scout. 608=1 and go to Question 5
- 2 – General observation. 608=2 and go to Question 7
- 3 – Were not scouted. 608=3 and go to Question 10

4. In 2023, 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. [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 fruit acres were not scouted. [Enter code 3 and go to item 10.]

Code

608

Section E: Pest Management Practices

Deliberate Scouting

Code

608

1

- If Question 4 = 1, ask Questions 5-9



5. Was an established scouting process used such as systemic sampling, recording counts, insect traps, etc., on any fruit acres?.....

Yes=1
No=3

609

Code

1

6. Was scouting for pests done on these fruit acres due to--

a. a pest advisory warning?.....

Yes=1
No=3

610

Code

1

b. a pest development model?.....

Yes=1
No=3

611

3

		[If column 1 is Yes, ask--]	
		Who did the majority of the scouting for column 1?	
		1 Operator, partner or family member 2 An employee 3 Farm supply or chemical dealer 4 Independent crop consultant or commercial scout	
		Yes = 1 No = 3	
7. Were your fruit acres scouted for --			
a. weeds?.....	612	1	614 1
b. insects or mites?.....	615	1	617 2
c. disease?.....	618	3	620

Section E: Pest Management Practices

General Observation

Code

608

2

- If Question 4 = 2, ask Questions 7-9



5. Was an established scouting process used such as systemic sampling, recording counts, insect traps, etc., on any fruit acres?.....		Yes=1 No=3	Code 609
6. Was scouting for pests done on these fruit acres due to--			Code
a. a pest advisory warning?.....		Yes=1 No=3	610
b. a pest development model?.....		Yes=1 No=3	611
7. Were your fruit acres scouted for --		Yes = 1 No = 3	[If column 1 is Yes, ask--] Who did the majority of the scouting for column 1? 1 Operator, partner or family member 2 An employee 3 Farm supply or chemical dealer 4 Independent crop consultant or commercial scout
a. weeds?.....	612	1	614 1
b. insects or mites?.....	615	1	617 2
c. disease?.....	618	3	620

E

PEST MANAGEMENT PRACTICES

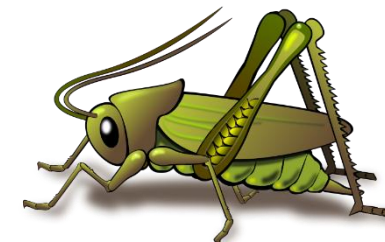
E

Other Items

		Code
8. Were written or electronic records kept to track the activity or numbers of weeds, insects or diseases?.....	Yes=1 No=3	623 1
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 1
10. Was field mapping data used for making pest management decisions?.....	Yes=1 No=3	625 3
11. Were the services of a diagnostic laboratory used for pest identification or soil or plant tissue pest analysis?.....	Yes=1 No=3	626 3
12. Were crop residues, including drops, rotting fruit and/or debris, removed to manage pests?.....	Yes=1 No=3	627 1
13. Were ground covers, mulches, or other physical barriers maintained to manage pest problems?.....	Yes=1 No=3	629 3
14. Were any beneficial organisms such as insects, nematodes, or fungi applied or released to manage pests?	Yes=1 No=3	636 1
15. Were floral lures, attractant repellants, pheromone traps or other biological pest controls used on any fruit acres?.....	Yes=1 No=3	637 3
16. Were any fruit acres cultivated for weed control during the growing season?.....	Yes=1 No=3	640 3

Yes=1 No =3

- Keep Records
- Mapping
- Crop Residues
- Ground Covers, mulches, etc.
- Planting locations & harvest dates
- Beneficial Organisms
- Irrigation



17. Were field edges, lanes, ditches, roadways or fence lines chopped, mowed, plowed, or burned to manage pests on any fruit acres?.....	Yes=1 No=3	642 1
18. Were equipment and implements cleaned after completing field work to reduce the spread of pests?.....	Yes=1 No=3	643 1
19. Were any fruit acres irrigated for the 2023 crop?.....	Yes=1 No=3	644 3
[If item 19 = Yes, ask—]		
a. Were water management practices, excluding chemigation, such as irrigation scheduling, controlled drainage, or treatment of retention water used to manage pests?.....	Yes=1 No=3	645

COMPLETION CODE for PEST MANAGEMENT PRACTICES	
1 Incomp/R	500

Do not code completion boxes at bottom of page 15

CONCLUSION

[Enumerator Note: Thank the respondent, then review this questionnaire.]

1. Ending time.....

0005

Office Use Only				
Ending Time (Military)		OR	Total Hours	
Hours	Minutes		Hours	Minutes
14	15	0008		

- Record the Ending Time OR Total Hours

Conclusion

Record Use

[Did respondent use operation records to report—]

Fertilizer data?.....

Code	
Yes=1	026
No=3	1

Pesticide data?.....

Yes=1	064
No=3	1

Supplement Use

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

Fertilizer Supplements.....

Number
067
0

Pesticide Supplements.....

068
0

Contact Information

Operator Email:

9929
FruitChem@aol.com

Operator Phone:

9917 Check to receive results by email <input checked="" type="checkbox"/>	9918 (123) 456-7890	check if cell phone <input checked="" type="checkbox"/>
--	------------------------	--

Operation Email: (if different from above)

9937

Operation Phone: (if different from above)

9920 Check to receive results by email <input type="checkbox"/>	9938 ()	check if cell phone <input type="checkbox"/>
---	-------------	---

Respondent Name:

9912
Ima Farmer

Respondent Phone (if different from above)

9911 ()	check if cell phone <input type="checkbox"/>
-------------	---

9910	MM	DD	YY
Date:	10	15	23

- How reliable is this data?
 - Rough guess?
 - Or did they use records?
- Supplement Use:
 - This is not asking if they used pesticides*
 - This is the number of respective **supplements** you used
- Who completed most of the questionnaire?
 - Leave notes if multiple people

This completes the survey. The results will be available on the release date at nass.usda.gov/results
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		
	1	1		2	48999	_____			
						Eval.	Change		
						9900	9985		

- Always write your 5-digit enumerator ID

Response Example: Operation Sold



Operator sold his operation during 2023 crop year.

Farmer A

Farmer A (Sold Farm in 2023)

CHANGE IN OPERATOR STATUS

[Enumerator Note: Skip this section if there is no change in operation name or operator.]

1. Has there been a change in operation name or operator?.....	Code
	Yes=1 023 1 No=3

[If item 1 = 1, complete name and address information below for new operator and continue.
If item 1 = 3, go to Enumerator Note below.]

_____	Operation Name <u>Daffy Duck Farm</u>
_____	Operator Name <u>Wood Duck</u>
_____	Address <u>1234 Rural Rd</u>
_____	<u>Sagebrush TX 56789</u>
_____	Phone (<u>512</u>) <u>123-9999</u>

[Enumerator Note: If the operation on the face page was in business part of the 2023 crop year, complete this questionnaire for the part of the year during which the operation did business, unless the operation has been taken over by a new operator. If the operator has changed midyear, please conduct this interview start to finish with the new operator after reading "Valid Substitution" rules in section 4 of the Interviewer's Manual.]

2. Has the operation printed on this questionnaire been combined or merged with any other farming operations?

☐ Yes – [Go to "Conclusion"]

☒ No – [Continue]

Farmer A (Sold Farm in 2023)

- If Farmer A completed his 2023 crop year harvest, then complete the questionnaire with Farmer A.
- If new operator DID MERGE this operation with another operation, then DO NOT CONTACT new operator. (No substitution is allowed)
- If Farmer A sold his farm before 2023 crop harvest, then contact new operator, only if new owner DID NOT MERGE this operation with another operation and can give data for all of 2023 crop year.

Consent Form

Consent Form

- Gives you (enumerator) the consent to get pesticide data from the caretaking company listed on the form.
- If caretaking company makes day-to-day decisions for target operator, then collect all data for Sections A-E.



2023 FCUS Consent Form



Project 141

OMB No. 0535-0218 Approval Expires 11/30/2024



2023 FRUIT CHEMICAL USE SURVEY Consent Form



**NATIONAL
AGRICULTURAL
STATISTICS
SERVICE**

STATE ____	POID _____
----------------------	----------------------

U.S Department of Agriculture
Room 5030, South Building
1400 Independence Ave., S.W.
Washington, DC 20250-2000
Phone: 1-800-727-9540
Fax: 1-202-690-2090
Email: nass@nass.usda.gov

The National Agricultural Statistics Service (NASS) of the U.S. Department of Agriculture is conducting a Fruit Chemical Use Survey for the 2023 crop year. The survey will be conducted from October 2023 through January 2023.

By signing this Consent Form, the Owner agrees to allow the caretaking company listed below to provide the necessary information for the completion of the Fruit Chemical Use Survey for the selected operation to the National Agricultural Statistics Service. In accordance with the Confidential Information Protection provisions of Title V, Subtitle A, Public Law 107-347 and other applicable Federal laws, your responses will be kept confidential and will not be disclosed in identifiable form to anyone other than employees or agents. By law, every employee and agent has taken an oath and is subject to a jail term, a fine, or both if he or she willfully discloses ANY identifiable information about you or your operation. Response is voluntary. Results of the survey, showing State and National level results for the selected commodities will be available at the end of July 2023. According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0535-0218. The time required to complete this information collection is estimated to average 60 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

Consent Form

Ask operator to complete the **Consent Form** with:

- Owner's information
- Check the box that consent was provided over the phone



Operator/Owner provided consent over the telephone.

- Fruit Caretaking Company contact information



2023 FCUS Consent Form



Operation Name:

Owner Name:

Owner Address:

Owner Signature:

Date:

Ima Farmer

1234 Rural Rd

Sagebrush TX 56789

10/15/23



Operator/Owner provided consent over the telephone.

Caretaking
Company Name:

Caretaking
Company Address:

Phone Number:

Doe Vegetable Services

999 Cloud Rd

Sagebrush TX 56789

512-999-1111

NASDA Field Enumerator: Joe Enumerator

CEU CARD

Continuing Education Unit



CEU Card

- One hour Continuing Education Unit (CEU)

Dear Producer:

Texas Department of Agriculture has agreed to grant one Continuing Education Unit (CEU) in Laws and Regulations to you for participating in this survey. This can be applied toward your pesticide applicator license requirements.

Our confidentiality rules require that we have your permission before we turn your name over to TDA for credit. We will provide TDA only information shown on this form. We will not disclose any other survey information to them. Please complete and sign the card below, so that we can make sure that you get the proper credit for completing the survey.

Thank you for your participation!

For additional information, please call 1-800-626-3142



Certificate of Completion



This certifies that

(Name) _____

has successfully completed Texas Department of Agriculture approved Pesticide Applicator Continuing Education Credits

One [1] Laws and Regulations Course Number xxxxxxxxxx

Wilbert Hundl, Jr.

Course Representative

month day, year

Note: Keep this certificate. In order to re-certify, you will be responsible for reporting completed continuing education credits.



CEU CARD

- Complete the required information below in its entirety.
- TDA will kick it back if any information is missing and the operator will not get credit.

PLEASE PRINT or TYPE ALL INFORMATION
(Information must be legible)

Name [**as it appears on License**]

Pesticide License # [**must be filled in**]

Address:

City: State: Zip:

Signature: Date:

Enumerator, please return with completed survey!

Enumerator name: POID

RETURN TO:

USDA/NASS
P O BOX 70
AUSTIN, TX 78767

ATTN: SURVEY SECTION

CEU Credit

- One per producer for a completed Fruit Chemical Use Survey only.
- Must already have a license to get credit.
- If multiple people help complete the survey, they each can get the credit (for example, 2 partners).
- Enumerators can also get credit.
- The Certificate of Completion will be mailed to the respondent as their questionnaire is returned.



United States Department of Agriculture
National Agricultural Statistics Service
Southern Plains Regional Field Office



Administrative Notes

Due Dates

- Data collection for Fruit Chemical Use
 - **October 17 – December 10**
- Enumerators will enter data on the paper questionnaires and give to supervisors for review.
- The CAPI listings are for information only to show what has been completed.
- Only refusals, inaccessibles, and OOBs should be submitted through CAPI.
- Completed questionnaires must be given to supervisors as soon as possible.

Due Dates

- Supervisors can meet enumerators in person once or twice to pick up completed work and review it together.
- After initial supervisor visit, enumerators must send completed questionnaires to their supervisor.
- Supervisors must send reviewed questionnaires to the NOC as soon as possible.
- Supervisors are provided UPS labels and supplies to ship to the NOC.
- The RFO will provide UPS labels and shipping supplies for enumerators to send work to supervisors on a “request” basis.

Due Dates

Stay in touch with your supervisor!!

December 10 is the last day to send questionnaires to your Supervisor.

December 14 is the last day to send completed questionnaires to the NOC.

All questionnaires and materials with PII must be sent back to Austin if not sent to the NOC.

Questionnaires need to be sent to the NOC as completed, DO NOT HOLD QUESTIONNAIRES!!

More Details

- Many enumerators are working ARMS 2 and Cotton OY.
- OY field work must take priority due to the tight timeframe for the field work.
- Fruit Chemical Use data collection is by telephone and personal interview.
 - If record is set to personal interview, please make no more than 2 visit attempts and try to make call attempts to schedule an interview day/time.
- Some interviews may take 2 or more contacts to complete.

More Details

It is best for the operator to have completed all field work but if not, get best estimates of chemical applications and field operations.

As always, the interview should be conducted at the best time for the operator.

Disconnected/Bad Phone Numbers

- Call the office to look up better numbers
 - 512-501-3200
 - Authur Chapman
 - Ayanna Sylvester
 - Carla Whitt
 - Gabe Massiate
 - Leonel Lopez
 - **DO NOT** email personally identifiable information (PII)
 - Names, addresses, phone numbers, etc..

Reminders

- Safety first!
- Please be a safe and considerate driver.
- As always, survey data and PII are confidential.
- **Stay in contact with your supervisor.**
- Report problems and issues early.
- NASDA-NASS website and survey website
- Use all of the resources you have.
- Project Code 141 -> Fruit Chemical Use
- Thank you!!

Thank you!!!