



**NATIONAL
AGRICULTURAL
STATISTICS
SERVICE**

**AGRICULTURAL RESOURCE MANAGEMENT STUDY
POTATO PRODUCTION
PRACTICES REPORT
for 1999**

Form Approved
O.M.B. Number 0535-0218
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Project Code 906
Phase II
Indiana State Project

U.S. Department of Agriculture
Rm 5805, South Building
1400 Independence Avenue, S.W.
Washington, D.C. 20250-2000
202-720-7017

VERSION 09	POID _____	TRACT 00	SUBTRACT _____	T-TYPE 0	TABLE 000	LINE 00
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CONTACT RECORD		
DATE	TIME	NOTES

R CODES	
3 - COMPLETE	0910
5 - OUT OF SCOPE	
8 - REFUSAL	
9 - INAC./INCOMPL.	
OPTIONAL	0002
OPTIONAL	0003

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

We are collecting information on practices to produce potatoes and need your help to make the information as accurate as possible. Authority for collection of information on the Potato Production Practices Report is Title 7, Section 2204 of the U.S. Code. This information will be used for economic analysis and to compile and publish estimates for your region and the United States. Response to this survey is confidential and voluntary.

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

1935

BEGINNING TIME [MILITARY] **H H M M**
0004

SCREENING BOX
0006

[ENUMERATOR NOTE: If Screening box is code 1, complete the Screening Supplement. If Screening box is not coded, begin with Section A.]

OFFICE USE
Completion Code 0008
3 = ZERO TARGET

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

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

A POTATO FIELD SELECTION A

1. How many acres of potatoes did this operation plant for the 1999 crop year?

[> If no acres planted, review Phase I Information Form. Make notes, then go to item 3 on back page.]

TOTAL PLANTED ACRES
0019

2. What is the TOTAL number of potato fields that were planted on this operation?

TOTAL NUMBER OF FIELDS PLANTED
0020

[If only 1 field, go to item 4.]

3. I will follow a simple procedure to make a random selection from the (Item 2) potato fields planted for the 1999 crop.

Please list these fields according to identifying name/number or describe each field. Then I will tell you which field has been selected.

- > [If there are more than 18 fields make sure item 2 is TOTAL fields planted, and list only the 18 fields closest to the operator's permanent residence.]
- > [If respondent is unable to identify or describe the fields, use the Field Selection Grid.]

FIELD NAME, NUMBER OR DESCRIPTION
1
2
3
4
5
6
7
8
9

FIELD NAME, NUMBER OR DESCRIPTION
10
11
12
13
14
15
16
17
18

APPLY "RANDOM NUMBER" LABEL HERE

4. [ENUMERATOR ACTION:

Circle the pair of numbers on the above label associated with the last numbered field in item 3. Select the field according to the number you circled on the label, and record the selected number. If only 1 field, enter 1.]

SELECTED FIELD NUMBER
0021

5. The field selected is (field name/number/description).

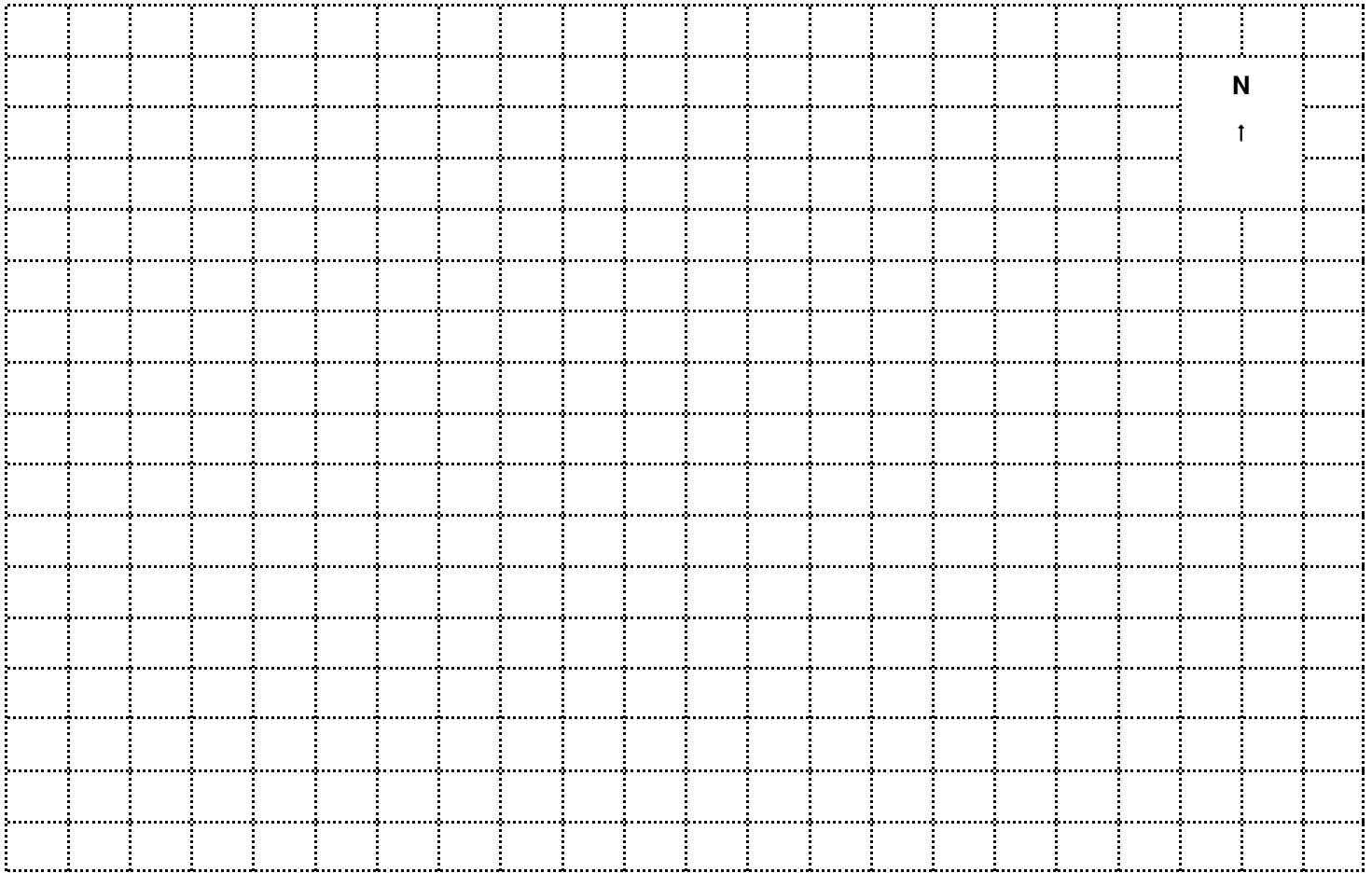
During this interview, the potato questions will be about this selected potato field.

[Be sure the operator can identify the selected field.]

OFFICE USE
OY Field Substituted
0022

POTATO FIELD SELECTION

Field Selection Grid



B FIELD CHARACTERISTICS---SELECTED FIELD

1. How many acres of potatoes did this operation plant in this field for the 1999 crop? ACRES
1935

4. On what date was this field planted? MM DD YY
1942
-1

6. What was the seeding rate per acre the first time this field was seeded? UNIT CODES for Seeding Rate
1=POUNDS
2=CWT.
4=BUSHELS
5=BARRELS
25=KERNELS/SEEDS
UNITS PER ACRE
1944 -1 1945 -1

7. Was the source of the potato seed-- CODE

1	Purchased?
2	Homegrown or traded?
3	Both?

..... 1948
-1

10. Has harvest of this field been completed? YES = 1 CODE
1952
-1

11. Now I need information about the acres harvested (or to be harvested) and the yields from this field.

	1 ACRES	2 What yield per acre did you get (do you expect to get) for-- UNITS PER ACRE	3 UNIT CODES 1=POUNDS 2=CWT 3=TONS 4=BUSHELS 5=BARRELS
How many acres in the potato field were (will be)--			
a. harvested for potatoes?	1953 -1	1954 -1	1955 -1
c. harvested for seed for planting?	1958 -1	1959 -1	1960 -1
d. abandoned?	1961 -1		
e. used for some other purpose?	1962 -1		

C FERTILIZER and NUTRIENT APPLICATIONS---SELECTED FIELD C

1. Were commercial FERTILIZERS applied to this field for the 1999 potato crop? YES=1
2. [If COMMERCIAL fertilizer applied, continue, else go to item 9.]
4. Now I need to record information for each application.

CODE	EDIT TABLE
2001	0201

CHECK LIST	
INCLUDE	EXCLUDE
<input type="checkbox"/> Custom applied fertilizers <input type="checkbox"/> Fertilizer applied in the fall of 1998 and those applied earlier if this field was fallow in 1998 <input type="checkbox"/> Commercially prepared manure	<input type="checkbox"/> Micronutrients <input type="checkbox"/> Unprocessed manure <input type="checkbox"/> Fertilizer applied to previous crops in this field

T-TYPE	TABLE
2	001
LINE 99	OFFICE USE LINES IN TABLE 0213

LINE	2 → → → MATERIALS USED			3 What quantity was applied per acre? <small>[Leave this column blank if actual nutrients were reported.]</small>	4 [Enter material code.] 1 Pounds 12 Gallons 19 Pounds of actual nutrients	5 When was this applied? 1 Before seeding (fall) 2 Before seeding (spring) 3 At seeding 4 After seeding	6 How was this applied? 1 Broadcast, ground without incorporation 2 Broadcast, ground with incorporation 3 Broadcast, by air 4 In seed furrow 5 In irrigation water 6 Chisel, injected or knifed in 7 Banded/Sidedressed in or over row 8 Foliar or directed spray 9 Spot treatments	7 How many acres were treated in this application? ACRES
	N Nitrogen	P ₂ O ₅ Phosphate	K ₂ O Potash					
01	0205	0206	0207	0208 -1	0209 -1	0210 -1	0211 -1	0212 . ___
02	0205	0206	0207	0208	0209	0210	0211	0212 . ___
03	0205	0206	0207	0208	0209	0210	0211	0212 . ___
04	0205	0206	0207	0208	0209	0210	0211	0212 . ___
05	0205	0206	0207	0208	0209	0210	0211	0212 . ___
06	0205	0206	0207	0208	0209	0210	0211	0212 . ___
07	0205	0206	0207	0208	0209	0210	0211	0212 . ___
08	0205	0206	0207	0208	0209	0210	0211	0212 . ___

T-TYPE 0	TABLE 000	LINE 00
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C FERTILIZER and NUTRIENT APPLICATIONS---SELECTED FIELD C

T-TYPE 0	TABLE 000	LINE 00
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9. Was a **soil test** performed on this field in 1998 or 1999 for the 1999 potato crop? YES = 1

2012	-1
------	----
10. Was a **plant tissue test** performed on this field in 1998 or 1999 for the 1999 potato crop? YES = 1

2013	-1
------	----
11. **Is lime ever applied to this field?** YES = 1

2014	-1
------	----
- a. *[If lime applied, ask--]*
- On average, how many years are there between applications of **lime** to this field?

YEARS	
2015	-1
- b. *[If lime applied, ask--]*
- How many tons of **lime** were applied per acre the last time it was applied to this field?

TONS PER ACRE	
2016	-1 .__
12. **Was sulfur applied to this field for the 1999 crop?** YES = 1

CODE	
2017	-1
- a. *[If sulfur applied, ask--]*
- How many pounds of sulfur were applied per acre?

POUNDS PER ACRE	
2018	-1 .__
13. **Was gypsum applied to this field for the 1999 crop?** YES = 1

CODE	
2019	-1
14. **Were micronutrients applied to this field for the 1999 crop?** YES = 1

CODE	
2020	-1
- a. *[If micronutrients applied, ask--]*
- Did the micronutrients include **zinc**? YES = 1

2021	-1
------	----

C FERTILIZER and NUTRIENT APPLICATIONS---SELECTED FIELD C

15. Was manure applied to this field for the 1999 potato crop?
(Exclude commercially prepared manure.)

- YES - [Enter code 1 and continue.]
- NO - [Go to Section D.]

CODE	
2022	-1

a. How many acres was manure applied to?

ACRES	
2023	-1

b. What was the total amount of manure applied to this field?

TOTAL TONS	OR	TOTAL GALLONS
2024		2025
-1		-1

c. Was the manure--

- | | |
|---|--|
| 1 | Dry Broadcast <i>without</i> incorporation? |
| 2 | Dry Broadcast <i>with</i> incorporation? |
| 3 | Liquid Broadcast <i>without</i> incorporation? |
| 4 | Liquid Broadcast <i>with</i> incorporation? |
| 5 | Injected/knifed in? |

CODE	
2026	-1

d. Was the major source of the manure from--

- | | |
|---|--|
| 1 | Beef cattle? |
| 2 | Dairy cattle? |
| 3 | Hogs? |
| 4 | Sheep? |
| 5 | Poultry? |
| 6 | Equine? |
| 7 | Biosolids (<i>municipal sludge, food waste, etc.</i>)? |
| 8 | Other (<i>Specify _____</i>)? |

CODE	
2027	-1

e. Was the manure--

- | | |
|---|---|
| 1 | Produced on this operation? |
| 2 | Purchased? |
| 3 | Obtained at no cost off this operation? |

CODE	
2028	-1

D PESTICIDE APPLICATIONS---SELECTED FIELD D

1. Including both custom applications and applications made by this operation, let's list all the chemicals used on this field for the 1999 potato crop.

Were any herbicides, insecticides, fungicides or other chemicals used on the potato field for the 1999 crop? YES = 1

CODE	EDIT TABLE
2030	0301

[Probe for applications made in the fall of 1998 (and those made earlier if this field was fallow).]
 [If none, go to Section E.]

CHECK LIST			
INCLUDE		EXCLUDE	
<input type="checkbox"/> Defoliants	<input type="checkbox"/> Insecticides	<input type="checkbox"/> Fertilizers reported earlier	
<input type="checkbox"/> Fungicides	<input type="checkbox"/> All other pesticides	<input type="checkbox"/> Seed treatments	
<input type="checkbox"/> Herbicides			

	T-TYPE	TABLE
	3	001
LINE 99	OFFICE USE LINES IN TABLE	0319

NOTES	LINE	2 What products were applied to this field? <small>[Show product codes from Respondent Booklet.]</small>	3 Was this product bought in liquid or dry form? <small>[Enter L or D.]</small>	4 Was this part of a tank mix? <small>[If tank mix, enter line number of first product in mix.]</small>	5 When was this applied? <small>1 BEFORE planting 3 AT planting 4 AFTER planting 5 Defoliation prior to harvest</small>	6 How much was applied per acre per application?	OR	7 What was the total amount applied per application in this field?	8 <small>[Enter unit code.]</small> 1 Pounds 12 Gallons 13 Quarts 14 Pints 15 Ounces 30 Grams
	01	0305		0306	0307	-1		-1	-1
	02	0305		0306	0307	.		.	0310
	03	0305		0306	0307	.		.	0310
	04	0305		0306	0307	.		.	0310
	05	0305		0306	0307	.		.	0310
	06	0305		0306	0307	.		.	0310
	07	0305		0306	0307	.		.	0310
	08	0305		0306	0307	.		.	0310
	09	0305		0306	0307	.		.	0310
	10	0305		0306	0307	.		.	0310
	11	0305		0306	0307	.		.	0310
	12	0305		0306	0307	.		.	0310
	13	0305		0306	0307	.		.	0310
	14	0305		0306	0307	.		.	0310

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

LINE	Pesticide Type <small>(Herbicide, Insecticide Fungicide, etc.)</small>	EPA No. or Tradename and Formulation	Form Purchased <small>(Liquid or Dry)</small>	Where Purchased <small>[Ask only if EPA No. cannot be reported.]</small>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

D PESTICIDE APPLICATIONS---SELECTED FIELD

APPLICATION CODES for column 9	
1 Broadcast, ground without incorporation	6 Chisel/injected or knifed in
2 Broadcast, ground with incorporation	7 Banded in or over row
3 Broadcast, by air (<i>Aerial application</i>)	8 Foliar or directed spray
4 In seed furrow	9 Spot treatment
5 In Irrigation water	



LINE	9 How was this product applied? <small>[Enter code from above.]</small>	10 How many acres in this field were treated with this product? ACRES	11 What was the number of times applied? NUMBER	12 What was the PRIMARY target pest for this application? <small>[Show Target Pest codes from Respondent Booklet.]</small>	13 This year, was the problem of this pest-- 1 worse than normal? 3 normal? 5 less than normal? 7 unknown? 9 not applicable?	14 Were these applications made by-- 1 Operator, Partner, Family member? 2 Custom applicator? 3 Employee / Other?
	01	0311 -1	0312 . __	0313	0314 -1	0315 -1
02	0311	0312 . __	0313	0314	0315	0316
03	0311	0312 . __	0313	0314	0315	0316
04	0311	0312 . __	0313	0314	0315	0316
05	0311	0312 . __	0313	0314	0315	0316
06	0311	0312 . __	0313	0314	0315	0316
07	0311	0312 . __	0313	0314	0315	0316
08	0311	0312 . __	0313	0314	0315	0316
09	0311	0312 . __	0313	0314	0315	0316
10	0311	0312 . __	0313	0314	0315	0316
11	0311	0312 . __	0313	0314	0315	0316
12	0311	0312 . __	0313	0314	0315	0316
13	0311	0312 . __	0313	0314	0315	0316
14	0311	0312 . __	0313	0314	0315	0316

T-TYPE 0	TABLE 000	LINE 00
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E PEST MANAGEMENT PRACTICES--SELECTED FIELD E

T-TYPE	TABLE	LINE
0	000	00

1. Now I have some questions about your pest management decisions and practices used on this field for the 1999 potato crop. By pests, we mean WEEDS, INSECTS and DISEASES.

2. Let's begin with questions about scouting this field for pests.

1		② [If YES, ask--] Who did the majority of the scouting for [column 1]--	
Was this potato field scouted for--		1 Operator, Partner or Family member? 2 an Employee? 3 Farm supply or Chemical dealer? 4 Independent Crop consultant or Commercial scout?	
	YES=1	CODE	
a. weeds?	2031 -1	2032	-1
b. insects?	2033 -1	2034	-1
c. diseases?	2035 -1	2036	-1

3. [If field SCOUTED, ask--]

Were written or electronic records kept for this field to track the activity or numbers of weeds, insects or diseases?

YES = 1

CODE
2037 -1

E PEST MANAGEMENT PRACTICES--SELECTED FIELD E

4. [Enumerator Action: Were HERBICIDES used (pesticide product codes 4000-4999), Section D, item 1 column 2?]
 YES - [Continue.] NO - [Go to item 9.]

5. Did you apply herbicides to this potato field BEFORE weeds emerged? YES = 1
 a. [Enumerator Action: Were PRE-EMERGENT HERBICIDES used?]
 YES - [Continue.] NO - [Go to item 7.]

CODE	
2038	-1

6. Did you decide to apply herbicides BEFORE weeds emerged on this potato field based on--
 a. a routine treatment for weed problems experienced in previous years? YES = 1
 b. field mapping of previous weed problems? YES = 1
 c. recommendations from a chemical dealer? YES = 1
 d. recommendations from an independent crop consultant? YES = 1

2039	-1
2040	-1
2041	-1
2042	-1

7. Did you apply herbicides to this potato field AFTER weeds emerged? YES = 1
 a. [Enumerator Action: Were POST-EMERGENT HERBICIDES used?]
 YES - [Continue.] NO - [Go to item 9.]

2043	-1
------	----

8. Did you decide to apply herbicides AFTER weeds emerged on the potato field based on--
 a. a routine treatment? YES = 1
 b. type and/or density of weed(s) present? YES = 1
 c. recommendations from a chemical dealer? YES = 1
 d. recommendations from an independent crop consultant? YES = 1

2044	-1
2045	-1
2046	-1
2047	-1

9. [Enumerator Action: Were INSECTICIDES used (pesticide product codes 1000-1999), in Section D, item 1 column 2?]
 YES - [Continue.] NO - [Go to item 11.]

10. Did you decide to apply insecticides to this potato field based on--
 a. a preventative schedule? YES = 1
 b. scouting data compared to University or Extension guidelines for infestation thresholds? YES = 1
 c. standard practices or history of insect problems? YES = 1
 d. local information (from other farmers, radio, TV, newsletters, etc.) that the pest was or was not present? YES = 1
 e. your (the operator's) own determination of the infestation level? YES = 1

2048	-1
2049	-1
2050	-1
2051	-1
2052	-1

E PEST MANAGEMENT PRACTICES--SELECTED FIELD E

OTHER PEST MANAGEMENT PRACTICES

- 11. Was protection of beneficial organisms a factor in your pest control decisions for this field? YES = 1

2053
-1

- 12. Did you use any beneficial organisms to control pests in this field? YES = 1

2054
-1

- 13. Did you use water management practices, such as controlled drainage or irrigation scheduling to control pests in this field? [Exclude chemigation.] YES = 1

2055
-1

- 14. Did you use tilling, chopping, mowing, burning of field edges, lanes, ditches, roadways or fence lines to control pests in this field? YES = 1

2056
-1

- 15. Did you clean equipment and implements after completing field work to reduce the spread of pests from this field? YES = 1

2057
-1

- 16. Did you cultivate this field for weed control during the growing season? YES = 1

2058
-1

- 17. Did you consider pest resistance when selecting which variety to plant in this field? YES = 1

2059
-1

- 18. Did you treat the seed used in this field for disease control? YES = 1

2060
-1

- 19. Did you adjust planting or harvesting dates to control pests? YES = 1

2061
-1

- 20. Did you use soil analysis to detect the presence of soilborne pests or pathogens in this field? YES = 1

2062
-1

- 21. Did you alternate pesticides (use pesticides with different mechanisms of action) to keep pests from becoming resistant to pesticides in this field? YES = 1

2063
-1

- 22. Did you adjust row spacing or plant density to control pests in this field? YES = 1

2064
-1

- 23. Did you rotate crops on this field during the past 3 years to control pests? YES = 1

2065
-1

- 26. Did you do any other type(s) of pest management to control pests in this field? YES = 1

2069
-1

 - a. [If YES, ask--]
 - What did you do? [List other activities.]

	2070
		-1
	2071
		-1
	2072
		-1

E PEST MANAGEMENT PRACTICES--SELECTED FIELD E

PEST MANAGEMENT INFORMATION

27. [Show Pest Management Information Sources code List.]

What was your primary outside source of information on pest management recommendations for the 1999 potato crop?

**PEST MANAGEMENT INFORMATION SOURCES
CODE LIST [Choose one.]**

- 1 Extension Advisor, Publications or Demonstrations
(County, Cooperative or University)
- 2 Farm Supply or Chemical Dealer
- 3 Commercial Scouting Service
- 4 Crop Consultant or Pest Control Advisor
- 5 Other Growers or Producers
- 6 Producer Associations, Newsletters or Trade Magazines
- 7 Electronic Information Services
(DTN, Internet, World Wide Web, etc.)
- 8 Other - (Specify _____)
- 9 None - Operator used no **outside** information source.

[Choose one source and enter code.]

2073
-1

PEST MANAGEMENT TRAINING

28. Have you (the operator) attended any training session on pest identification and management since October 1, 1998? YES = 1

CODE
0028
-1

29. Have you (the operator) completed courses leading to certification for applying "Restricted Use" pesticides? YES = 1

CODE
0029
-1

OFFICE USE
0030

F **FIELD OPERATIONS --- SELECTED FIELD**

		CODE
4.	Was there (will there be) a yield monitor on the equipment used to harvest this potato field?	2077 -1
	a. [If YES, ask--]	
	Was (will there be) a yield map produced from this harvest using information from the yield monitor?	2078 -1
5.	Regardless of when done, has this field been soil grid-sampled and grid-mapped?	2079 -1
6.	Was this field remotely sensed (by airplane or satellite) and an image produced either before or during the 1999 growing season?	2080 -1
7.	Was variable rate technology (VRT) used for--	
	a. fertilization or liming?	2081 -1
	b. seeding?	2082 -1
	c. pesticide applications?	2083 -1

NOTES and CALCULATIONS:

CONCLUSION

LOCATION OF SELECTED FIELD

1. I need to locate the selected field of potatoes on this map.

COUNTY NAME

OFFICE USE--
COUNTY FIPS CODE

0010

What county is the selected potato field in?

2. [ENUMERATOR ACTION:

*Mark map to indicate where the selected potato field is located.
Be sure the "X" marked on map is in county identified above.]*

CODE

0099

3. Would you like to receive a copy of the results of this survey in the mail?

(Results will also be available on the Internet at <http://www.usda.gov/nass>) YES = 1

RECORDS USE

4. [Did respondent use farm/ranch records to report--]

a. [fertilizer data?] YES = 1

0011

b. [pesticide data?] YES = 1

0012

SUPPLEMENTS USED

5. [Record the total number of each type of supplement used to complete this interview.]

FERTILIZER
APPLICATIONS

NUMBER

0041

PESTICIDE
APPLICATIONS

0042

RESPONDENT

- 1 OPERATOR/MANAGER/PARTNER
- 2 SPOUSE
- 3 ACCOUNTANT/BOOKKEEPER
- 4 OTHER

CODE

0101

Respondent's name
[if code 3 or 4]

Phone ()

MILITARY TIME
H H M M

0005

ENDING TIME [MILITARY]

MM DD YY

0007

DATE:

99

ENUMERATOR ID

0098

ENUMERATOR NAME

EVALUATION

0100