

Non-substantive Change Request

0535-0218 – Agricultural Resource Management Survey (ARMS) Phase 2 & Fruit Chemical Use Survey

Barley Production Practices Report

Oat Production Practices and Cost Report

Peanut Production Practices and Cost Report

Soybean Production Practices and Cost Report

Fruit Chemical Use Survey – CA Version

Fruit Chemical Use Survey – Enterprise Version

Following a review of the ARMS 2 and Fruit Chemical Use questionnaires that were recently approved by OMB through a renewal on June 5, 2023, the USDA Economic Research Service, with consultation with NASS updated the question text and enumerator instruction based on further consultation.

There are more changes for oats and peanuts than the other questionnaires because the questionnaires submitted for the recent OMB renewal were based on the previous survey data for that commodity was collected for peanuts, oats, and soybeans.

- Peanuts last conducted in 2013, and
- Oats last conducted in 2015

Compared with soybeans last enumerated in 2018. This relates to the changes in agriculture since 2013 and 2015 respectively.

The changes are described below. Changes will be documented by each version and section separately. The sections:

• Field Selection	• Pest Management Practices
• Field Characteristics	• Field Operations
• Nutrient or Fertilizer Applications	• Irrigation
• Biocontrol or Pesticide Applications	

remain the same as previous.

Barley Production Practices Report

Section A – Barley Field Selection

The field selection process has been updated to accommodate for Computer Assisted Personal Interview (CAPI) data collection. This allows NASDA enumerators to complete interviews by phone, if requested by the respondent.

From

3. 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 Supplement.]

FIELD NAME, NUMBER OR DESCRIPTION	FIELD NAME, NUMBER OR DESCRIPTION
1	10
2	11
3	12
4	13
5	14
6	15
7	16
8	17
9	18

APPLY 'RANDOM NUMBER' LABEL HERE

OFFICE USE:
OY Field Substituted

0022

SELECTED FIELD
NUMBER

0021

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]
5. The field selected is _____ (field name/number/description).
During this interview, the Barley questions will be about this selected Barley field.
[Be sure the operator can identify the selected field.]

To

3. [Now, I need to identify a barley field to be used for this survey.] The barley field pre-selected for this interview is the:

- 1 ☐ Northern most field
- 2 ☐ Southern most field
- 3 ☐ Eastern most field
- 4 ☐ Western most field
- 5 ☐ Northeastern most field
- 6 ☐ Southeastern most field
- 7 ☐ Northwestern most field
- 8 ☐ Southwestern most field

Field description:

4. The field selected is _____ (field name/number/description).
During this interview, the barley questions will be about this selected barley field.
[Be sure the operator can identify the selected field.]

Section C – Nutrient or Fertilizer Applications

There is an additional column in the “Materials Used” sub-table to collect information on the Source/Form of Nitrogen Used: Choose from

Nitrogen Codes for Column 2 Source/Form of N Used	
1 Anhydrous ammonia	6 Ammonia sulfate
2 Nitrogen solution (UAN)	7 Potassium nitrate, magnesium nitrate, and calcium nitrate
3 Urea	8 Other nitrogen fertilizer material [specify: _____]
4 Ammonium nitrate	
5 Sodium nitrate	

Section E – Pest Management Practices

The following questions have been added prior to the “In 2023, how was this field primarily scouted for insects, weeds, diseases, and/or beneficial organisms?” question:

In Section E, item 1, column 2:

- ☐ Yes - Continue ☐ No - Go to item 6

		Code
4. Were herbicides applied to the selected barley field before weeds emerged?.....	Yes=1 No=3	0803
5. Were herbicides applied to the selected barley field after weeds emerged?.....	Yes=1 No=3	0805
6. Were records kept for the selected field to track the activity or numbers of weeds, insects, or diseases?.....	Yes=1 No=3	0823
7. Did you use published information on infestation thresholds to determine when to take measures to manage pests in the selected field?.....	Yes=1 No=3	1824

The following questions have been removed:

		CODE
8. Were records kept for this field to track the activity or numbers of weeds, insects or diseases?	YES = 1	0823
9. Did you use published information on infestation thresholds to determine when to take measures to manage pests in field?	YES = 1	0824

Oat Production Practices and Cost Report

Section A – Oat Field Selection

The following questions were added to collect information for the whole farm:

		Code
a. Did you produce any acres of certified organic oats?.....	Yes = 1 No = 3	XXXX
b. Of the total (item 1) acres, how many were planted using/as —		
	Total Acres	Number of Fields
i. Conventional oats?.....	XXXX	XXXX
ii. Certified organic oats?.....	XXXX	XXXX

The field selection process has been updated to accommodate for Computer Assisted Personal Interview (CAPI) data collection. This allows NASDA enumerators to complete interviews by phone, if requested by the respondent.

From

3. **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 Supplement.]

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

OFFICE USE
OY Field Substituted

0022

SELECTED FIELD
NUMBER

0021

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]**
5. **The field selected is _____ (field name/number/description).**
During this interview, the Barley questions will be about this selected Barley field.
[Be sure the operator can identify the selected field.]

To

3. [Now, I need to identify a barley field to be used for this survey.] The barley field pre-selected for this interview is the:

- 1 ☐ Northern most field
- 2 ☐ Southern most field
- 3 ☐ Eastern most field
- 4 ☐ Western most field
- 5 ☐ Northeastern most field
- 6 ☐ Southeastern most field
- 7 ☐ Northwestern most field
- 8 ☐ Southwestern most field

Field description:

4. The field selected is _____ (field name/number/description).
During this interview, the barley questions will be about this selected barley field.
[Be sure the operator can identify the selected field.]

Section B – Field Characteristics

A new question on the cost for third party organic certification.

[If item 1a = 1 or 2, then ask—]

b. What was the cost, per acre, for third party organic certification?.....

Dollars & Cents
per Acre

1399

A question for the cost to the contractor (if under a production contract) was removed.

6. What was the total cost for all inputs provided by any contractor for the 2023 crop on the selected field? *(Include the costs for all inputs, such as seed, fertilizer, chemicals, technical services, custom operations, drying and irrigation.)*.....

DOLLARS & CENTS
PER ACRE

1309

OR

TOTAL DOLLARS

1310

Additional questions for seed treatment and/or commercial seed product were added.

[If any seed purchased (item 8 = 1 or 3), ask—]

9. What was the total cost per unit of purchased seed for the selected field? INCLUDE operator, landlord, and contractor costs, cost of seed treatment, and technology fee....

Dollars & Cents per Unit	4=Bushels 22=Acres 23=50 lb. Bags
1319	1320
Code	

10. For the 2023 oat crop, was the oat seed—

1 Treated with a pesticide prior to purchase?	3062
2 Treated with a pesticide after purchase?	
3 Not treated with a pesticide?	

[If item 10 = 1 or 2, continue, otherwise go to item 11.]

a. What was the name of the seed treatment? [Write seed treatment name in the box provided.]

Seed Treatment Name
1289

b. What was the seed treatment code? [Enter the appropriate seed treatment code from the Respondent Booklet. Enter "999" if a seed treatment was applied but is not listed. Enter "-1" if the seed treatment is not known.]

Code
2325

11. For the 2023 oat crop, did you plant a commercial seed product on the selected field?

Code
2340
Yes=1 No=3

[If item 11 = 1, ask—]

a. What was the name of the seed product? [Write seed product name in the box provided.]

Commercial Seed Product Name
2342

b. What was the seed product code? [Enter the appropriate product code from the Respondent Booklet. Enter "999" if a seed product was purchased but is not listed. Enter "-1" if the product is not known.]

Code
2343

The table in question 18 was modified as follows:

Columns removed: "How did you manage this crop?" and "Was this field irrigated?"

Column added: "If a cover crop was planted, how did you terminate this cover crop?"

The following questions were removed:

		CODE
i.	Did you use a cover crop in conjunction with the 2023 oat crop on this field? YES = 1	1401
[If item 18a is YES, continue; else go to item 19]		
		YEAR
(i)	What year was the cover crop planted?	1466
		CODE
(ii)	In what season was the cover crop planted?	1467
		DOLLARS & CENTS PER ACRE
(iii)	Was the seed for the cover crop purchased?	1468
	If yes, what was the seed cost per acre for the cover crop?	

And replaced by the following

[If a cover crop was planted in Spring/Summer/Fall 2022, ask—]

		Dollars & Cents per Acre
j.	What was the seed cost per acre for the cover crop?.....	1468
k.	What was the per-acre cost-share or financial assistance payments received for the cover crop? If no program payment was received, enter zero.....	1495
20. Is this field managed under an NRCS-approved conservation plan for highly erodible land (HEL)? (All fields that have been designated as HEL by USDA, and that are being actively farmed, are required to have soil conservation plans under the conservation compliance program.).....		Code Yes=1 0702 No=3
21. Does the selected field contain a wetland? Wetlands are subject to Wetland Conservation (WC) or "swampbuster" requirements. Producers who receive farm program payments must refrain from draining wetlands to make them ready for crop production.....		Code Yes=1 1405 No=3

Question 19 (and table) – removed.

Question 21 (and table) – removed.

Question 23 – removed.

Question 24 (and table) – removed.

Question 25 and 26 – removed.

Question 30 – one additional sub question for water availability.

New questions added are:

		Hours
26.	On average, how many hours does it take your field to return to normal soil moisture levels following a heavy storm?.....	2606
a.	Does this system include a mechanism for controlled drainage (e.g. stop logs, risers, or float mechanisms)?.....	Code Yes=1 2406 No=3
28.	During the last four years, did you apply for conservation funding, either through any Federal, State, or local program, for the selected oat field?.....	Code Yes=1 2402 No=3

29. [Now I need information on soil, crop, and land management practices or activities used on the selected field and any financial assistance you may have received in conjunction with those practices.]

a. Please check any practices or activities that you used on the selected field this year or any time in the past.

On-field Soil and Crop Management 1 <input type="checkbox"/> No-till/strip-till 2 <input type="checkbox"/> Conservation tillage except no-till/strip-till 3 <input type="checkbox"/> Cover crop – single species 4 <input type="checkbox"/> Cover crop mix 5 <input type="checkbox"/> Contour farming 6 <input type="checkbox"/> Conservation crop rotation 7 <input type="checkbox"/> Laser leveling	10 <input type="checkbox"/> Terraces 12 <input type="checkbox"/> Grass waterway 20 <input type="checkbox"/> Implement a nutrient management plan – written plan. 21 <input type="checkbox"/> Precision nutrient application 22 <input type="checkbox"/> Subsurface phosphorous application 23 <input type="checkbox"/> No fertilizer application more than 30 days before planting 24 <input type="checkbox"/> Controlled release or enhanced efficiency fertilizer 26 <input type="checkbox"/> Split nitrogen application with at least 50% applied after planting	30 <input type="checkbox"/> Implement an integrated pest management plan – written plan 31 <input type="checkbox"/> Drift reducing spray nozzles 32 <input type="checkbox"/> Targeted sprayer – electrical control Adjacent to Field 33 <input type="checkbox"/> Filter strip 34 <input type="checkbox"/> Field border 35 <input type="checkbox"/> Riparian buffer – grass or forest 50 <input type="checkbox"/> Irrigation water management plan 99 <input type="checkbox"/> None of the above
---	--	--

b. For each practice or activity checked in 29a, please complete one line of this table.

[Enumerator Note: If "99:None of the above" was selected, report code "99" in the first row (item 1610).]

1 Practice or Activity on the Selected Field	2 Practice Code (see item 29a) Code	3 Was this practice or plan used on this selected field in 2023? 1 Used in 2023 2 Not used in 2023 but used in earlier years Code	4 What financial assistance (cost share) has been received for this practice on this field? 1 Received a payment in 2023 from EQIP, CSP, or similar program 2 Did not receive a payment in 2023 but have in earlier years 3 Have never received a payment for this practice Code	5 Does this practice or activity help satisfy— 1 A federal, state, or local regulatory requirement 2 Highly erodible land conservation compliance 3 Does not relate to any regulation or compliance requirement Code
	1610	1614	1612	1613
	1615	1619	1617	1618
	1620	1624	1622	1623
	1625	1629	1627	1628
	1630	1634	1632	1633

30. In 2023, were the oats in the selected field covered by a single or named peril crop insurance policy (e.g. hail, replant, wind, freeze, etc.)?.....

Yes=1
No=3

Code
1393

[If item 30 = 1, continue. Otherwise, go to item 31.]

a. In 2023, were the oats in the selected field covered by more than one single or named peril crop insurance policy (e.g. hail, replant, wind, freeze)?.....

Yes=1
No=3

Code
2721

b. What was the dollar amount of coverage per acre for the single peril policy covering the selected field?.....

Dollars & Cents
per Acre
1395

c. What was the premium cost per acre for the single peril policy covering the selected field in 2023? EXCLUDE any sign-up fee.....

2722

d. What was the percent deductible for the single peril policy covering the selected field? (Record no deductible as 0%).....

Percent
2723

e. Did you (or will you) collect an indemnity payment for the selected field from the single peril policy during 2023?.....

Yes=1
No=3

Code
2724

31. In 2023, were the oats in the selected field covered by a multi-peril federal program that provided protection against yield or revenue losses? These types of policies include crop insurance and crop disaster assistance programs.....

Yes=1
No=3

Code
1385

[If item 31 = 1, continue. Otherwise go to Section C.]

a. What type of multi-peril coverage did you obtain?.....

1 Noninsured Crop Disaster Assistance Program (NAP CAT)
2 Federal CAT (basic catastrophic insurance)
3 Noninsured Crop Disaster Assistance Program buy-up
4 Actual Production History (APH) buy-up
5 Revenue Protection (RP)
6 Other Federal crop insurance

Code
1386

[If item 31a = 2, ask—]

i. What percent of yield coverage did you select for the selected field?.....

Percent
1387

ii. What percent of revenue coverage did you select for the selected field?.....

1388

[If item 31a = 3, ask—]

iii. What percent of revenue coverage did you select for the selected field?.....

Percent
1389

b. What type of unit coverage did you purchase for the multi-peril policy on the selected field?.....

1 Basic
2 Optional
3 Enterprise

Code
2524

c. In what year did you, the operator listed on the label, first purchase multi-peril crop insurance on the selected field?.....

Year
2525

d. What is the 2023 Approved APH (actual production history) yield for the selected field?.....

CWT per Acre
2526

e. What was the premium paid for multi-peril crop insurance for the selected field in 2023? EXCLUDE any administrative fee.....

Dollars & Cents
per Acre
2527

f. Did you or will you collect an indemnity payment for the selected field from multi-peril crop insurance during 2023?.....

Yes=1
No=3

Code
2528

Section C – Nutrient or Fertilizer Applications

There is an additional column in the “Materials Used” sub-table to collect information on the Source/Form of Nitrogen Used: Choose from

Nitrogen Codes for Column 2 Source/Form of N Used	
1 Anhydrous ammonia	6 Ammonia sulfate
2 Nitrogen solution (UAN)	7 Potassium nitrate, magnesium nitrate, and calcium nitrate
3 Urea	8 Other nitrogen fertilizer material [specify:_____]
4 Ammonium nitrate	
5 Sodium nitrate	

New questions for nitrogen inhibitors are included:

14. Which of the following products did you use to slow the breakdown of nitrogen on this field?.....

1 Nitrification inhibitors (such as N-Serve)	Code
2 Urease inhibitors (such as Agrotain)	0241
3 Chemical-coated fertilizers (such as sulfur-coated urea and polymer-coated urea)	
4 Other inhibitors	
5 None	

[If nitrogen inhibitors were used, continue. Otherwise go to item 15.]

a. How much nitrogen inhibitor did you mix with the nitrogen applied to the selected field?.....

Pounds per Acre	OR	Gallons per Acre
2561		2562
Dollars & Cents per Pound	OR	Dollars & Cents per Gallon
0297		0298

b. What was the cost of nitrogen inhibitors used on this field? INCLUDE operator, landlord, and contractor costs.....

Item 14d – Removed.

Items 15 and 17 – Combined into a new question 16 for “manure or compost”.

Questions added for manure or compost (New item 16):

h. What is the distance in miles between the manure or compost storage/production location and the selected field?.....

Miles
0291

i. Of the manure or compost applied to the selected field, was any tested for nutrient content prior to application?.....

Code
0261

j. Was the application rate of commercial nitrogen fertilizer on the selected field reduced due to manure or compost application?.....

Yes=1 No=3	Code
Yes=1 No=3	0262

[If 16j = 1, ask—]

i. By what percent did you reduce the commercial nitrogen fertilizer application rate on the selected field?.....

Percent
0263

ii. Did you adjust the oat harvest date for the selected field due to the application of manure or compost?.....

Code
0280

Section D – Biocontrol or Pesticide Applications

New Item 4c:

	Dollars & Cents per Acre	OR	Total Dollars
c. How much was spent for fungicide products applied to the selected field? INCLUDE operator, landlord, and contractor costs.....	3038		3039

New Questions:

6. Were records kept for the selected field to track the activity or numbers of weeds, insects, or diseases?.....	Yes=1 No=3	0823
7. Did you use published information on infestation thresholds to determine when to take measures to manage pests in the selected field?.....	Yes=1 No=3	1824

Item 9 – Removed.

New Questions:

1	2	3
13. Do you believe that the selected field was infested with any of the following pests or diseases?		[If column 2 = 1, ask—] Do you believe that the infestation/population level was higher than the economic threshold for treatment? 1 Much higher (over 1.5 times the threshold) 2 Higher (between 1 and 1.5 times threshold) 3 Lower (between 1 and .5 times the threshold) 4 Much lower (between .5 and 0 times the threshold) 99 Don't Know
	Yes=1 No=3	Code
a. Crown rust.....	XXXX	XXXX
b. Stem rust.....	XXXX	XXXX
c. Barley dwarf virus.....	XXXX	XXXX

<p>20. Were water management practices such as irrigation scheduling, controlled drainage, or treatment of retention water used on the selected field to manage pests or toxin-producing fungi and bacteria?.....</p>	<p>Yes=1 No=3</p>	<p>Code 0861</p>
<p>21. Was protection of beneficial organisms a factor in your pest control decisions for the selected field?.....</p>	<p>Yes=1 No=3</p>	<p>Code 1765</p>
<p>[If item 21=1, continue. Otherwise go to item 22.]</p>		
<p>a. Did you change timing of, reduce application rate of, or eliminate a pesticide application?.....</p>	<p>Yes=1 No=3</p>	<p>Code 1766</p>
<p>b. Did you change to an alternative pesticide, biocontrol, or non-pesticide practice?.....</p>	<p>Yes=1 No=3</p>	<p>Code 1767</p>
<p>Unit Codes 1 Pounds 2 CWT 3 Tons 4 Bushels</p>		
<p>22. If untreated (either with herbicides, tillage, or cultivation), how much yield loss (e.g. bushels per acre) do you think weeds would most likely cause on the selected field?</p>	<p>Units per Acre 2735</p>	<p>2736</p>
<p>Code</p>		
<p>23. Did pests, such as weeds, insects, pathogens, or animals, cause any yield loss on the selected field in spite of your pest control efforts?.....</p>	<p>Yes=1 No=3</p>	<p>Code 0827</p>
<p>[If item 23 = 1, ask]</p>		
<p>a. How much yield loss per acre do you think was caused by all pests on the selected field in spite of the management practices you used to reduce those losses?.....</p>	<p>Units per Acre 0829</p>	<p>0828</p>
<p>Unit Codes 1 Pounds 2 CWT 3 Tons 4 Bushels</p>		
		<p>OR</p>
		<p>Total Units 0830</p>

Section F – Field Operations

New questions on machine purchases:

[Enumerator Action: Were machine or equipment codes reported in Question 1?]

<p>xxxx 1 <input type="checkbox"/> Yes – Continue</p>	<p>3 <input type="checkbox"/> No – Go to item 3</p>	<p>Code xxxx</p>
<p>2. Were any of the machines or equipment reported in Columns 2 or 3 of Question 1 purchased new during 2023?.....</p>		<p>Yes = 1 No = 3</p>

[If item 2 = 1, continue. Otherwise go to item 3.]

1	2	3
Machine purchased new in 2023	[Record machine code from respondent booklet.]	Dealer's list price of the machine. (This should be the "sticker price", not including discounts or trade-in values for used machinery.)
	Code	Dollars
xxxx	xxxx	xxxx
xxxx	xxxx	xxxx
xxxx	xxxx	xxxx
xxxx	xxxx	xxxx
xxxx	xxxx	xxxx

New questions:

9. Were the oats harvested and hauled from the selected field dried (or will be dried) before it was sold or stored?.....	Yes=1 No=3	Code 2748
10. Did you hire any technical or consultant services to make recommendations such as for nutrient, pest control, irrigation, or precision farming for the selected field?.....	Yes=1 No=3	Code 1196

[If any item in 11a–g = 1, continue. Otherwise go to item 13.]

12. Were any of the technical or consultant services listed in item 11a–g provided to you at no cost or were partially reimbursed by the Natural Resources Conservation Service (NRCS)?.....	Yes=1 No=3	Code XXXX
--	---------------	--------------

[If any item 17a–d = 1, ask—]

e. What was the cost for all of these services? INCLUDE operator, landlord and contractor costs. EXCLUDE costs for any of these services if they were previously reported as part of the costs of materials and/or application.....	Dollars & Cents per Acre 3150	OR	Total Dollars 3151
---	----------------------------------	----	-----------------------

[If item 15g column 2 = 1, ask—]

18. In the selected field, did you use the UAV for any of the following purposes?	Code
a. Weed analysis?.....	Yes=1 3161 No=3
b. Yield analysis?.....	Yes=1 3165 No=3
c. Moisture analysis?.....	Yes=1 3166 No=3

19. Was any of the following GPS-enabled (Global Positioning System) equipment used to produce oats on the selected field in 2023?	Code
a. Mounted in-cab heads-up displays?.....	Yes=1 2155 No=3
b. Smart phones or computer tablets?.....	Yes=1 2156 No=3
c. Automatic section control, such as auto sprayer boom controls or automatic section shut offs?.....	Yes=1 2165 No=3

20. If any GPS-enabled equipment was used, what was the cost to purchase and install all GPS-enabled equipment, not including guidance auto-steering equipment? INCLUDE cost for GPS receiver and annual GPS subscription fee, and operator, landlord, and contractor costs. EXCLUDE costs for any of this equipment if they were previously reported as part of the costs of materials and/or application.....	Dollars & Cents per Acre 2166	OR	Total Dollars 2167
---	----------------------------------	----	-----------------------

21. Were any automated guidance systems (i.e. auto-steer), excluding Light Bar, used on the selected field?.....	Yes=1 No=3	Code 2148
--	---------------	--------------

[If item 21 = 1 continue, otherwise go to item 21f.]

a. Was the automated guidance system?.....	1 New, owned? 2 Used, owned? 3 Leased?	Code 2158	
b. What year was the automated guidance system first purchased?.....	Year 2159		
c. What is the replacement cost for the automated guidance system?.....	Dollars & Cents per Acre 2160	OR	Total Dollars 2161
d. What is the annual fee for the automated guidance system?.....	Dollars & Cents per Acre 2162	OR	Total Dollars 2163
e. What is the primary reason you chose to use an automated guidance system? (Select all that apply.)	<div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;">xxxx <input type="checkbox"/> Increase yields</div> <div style="width: 50%;">xxxx <input type="checkbox"/> Reduce input costs</div> <div style="width: 50%;">xxxx <input type="checkbox"/> Reduce operator fatigue</div> <div style="width: 50%;">xxxx <input type="checkbox"/> Improve soil conditions (i.e. soil compaction)</div> <div style="width: 50%;">xxxx <input type="checkbox"/> Technology came "standard" on my equipment</div> <div style="width: 50%;">xxxx <input type="checkbox"/> Reduce environmental impacts (i.e. emissions)</div> <div style="width: 50%;">xxxx <input type="checkbox"/> Other</div> </div>		

[If item 21 = 3, ask—]

f. What is the primary reason you chose not to use an automated guidance system? (Select all that apply.)	<div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;">xxxx <input type="checkbox"/> Costs are too high relative to benefits</div> <div style="width: 33%;">xxxx <input type="checkbox"/> Benefits are uncertain</div> <div style="width: 33%;">xxxx <input type="checkbox"/> Too complicated to use</div> <div style="width: 33%;">xxxx <input type="checkbox"/> Not sufficiently accurate</div> <div style="width: 33%;">xxxx <input type="checkbox"/> Not suitable for my operation</div> <div style="width: 33%;">xxxx <input type="checkbox"/> Other</div> </div>		
---	--	--	--

22. Was a variable rate applicator used on the selected field?..... Code
 Yes=1 2164
 No=3

[If item 22 = 1 continue, otherwise go to Section G]

Please report the variable rate applicator types you used on the selected field to produce this crop. If a particular row's variable rate applicator was not used, leave that row blank.

1 Was a variable rate applicator used on the selected field for—	2 Tool Used Yes=1 No=3	3 Was this applicator?— 1 Sensor-based 2 GPS-based 3 Both 4 Neither Code	4 Was this applicator?— 1 New, owned 2 Used, owned 3 Leased Code	5 What year was the applicator first used? Year	6 Premium paid for the applicator Total Dollars
a. seeding.....	1158	2170	2171	2172	2173
b. fertilizer/lime applications.....	1152	2174	2175	2176	2177
c. pesticide applications.....	1159	2178	2179	2180	2181
d. irrigation applications.....	1197	2182	2183	2184	2185

Section G – Irrigation

New screening item:

9. Was any additional mainline or lateral pipe used to carry water from the source to the system in the same wells during the 2023 growing season?..... Code
 Yes=1 2211
 No=3

Peanut Production Practices and Cost Report

Section A – Peanut Field Selection

The field selection process has been updated to accommodate for Computer Assisted Personal Interview (CAPI) data collection. This allows NASDA enumerators to complete interviews by phone, if requested by the respondent.

From

3. **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 Supplement.]*

FIELD NAME, NUMBER OR DESCRIPTION	FIELD NAME, NUMBER OR DESCRIPTION
1	10
2	11
3	12
4	13
5	14
6	15
7	16
8	17
9	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 one field, enter 1.]*

**SELECTED FIELD
NUMBER**

0021

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

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

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

To

3. [Now, I need to identify an peanut field to be used for this survey.] The peanut field pre-selected for this interview is the:

- 1 ☐ Northern most field
- 2 ☐ Southern most field
- 3 ☐ Eastern most field
- 4 ☐ Western most field
- 5 ☐ Northeastern most field
- 6 ☐ Southeastern most field
- 7 ☐ Northwestern most field
- 8 ☐ Southwestern most field

Field description:

4. The field selected is _____ (field name/number/description).
During this interview, the peanut questions will be about this selected peanut field.
[Be sure the operator can identify the selected field.]

5. For the randomly selected field above, please provide the following Farm Service Agency (FSA) identifiers:

[Having this information helps USDA make better use of other data you have provided to USDA and will improve the types of statistical analysis that can be done with the responses from this survey. If the physical field in this survey spans multiple FSA administrative fields, please include the farm, tract, and field number for the largest administrative field. These numbers are field identifiers that USDA uses to administer farm programs like crop insurance, commodity programs, and conservation programs.]

	Number
a. Farm Number (up to 8 digits).....	1070
b. Tract Number (up to 7 digits).....	1071
c. Field Number (up to 4 digits, exclude subfield letters).....	1072

Section B – Field Characteristics

A new question was added about planting intentions:

	Code
a. When planted, was this peanut field planted with the intention of—? INCLUDE peanuts planted for commercial seed contract under other uses.....	3117

A new question was added to obtain the type of peanuts planted:

	Code
3. What type of peanuts were planted in this field?.....	1540

Item 9a – removed.

The following questions were added for seed treatment and commercial seed:

		Code
11. For the 2023 peanut crop, was the peanut seed—.....	<div style="border: 1px solid black; padding: 2px;"> 1 Treated with a pesticide prior to purchase? 2 Treated with a pesticide after purchase? 3 Not treated with a pesticide? </div>	3062
[If item 11 = 1 or 2, continue, otherwise go to item 12.]		
Seed Treatment Name		
a. What was the name of the seed treatment? [Write seed treatment name in the box provided.].....	1289	
b. What was the seed treatment code? [Enter the appropriate seed treatment code from the Respondent Booklet. Enter "999" if a seed treatment was applied but is not listed. Enter "-1" if the seed treatment is not known.].....		Code 2325
		Code
12. For the 2023 peanut crop, did you plant a commercial seed product on the selected field?.....	Yes=1 No=3	2340
[If item 12 = 1, ask—]		
Commercial Seed Product Name		
a. What was the name of the seed product? [Write seed product name in the box provided.].....	2342	
b. What was the seed product code? [Enter the appropriate product code from the Respondent Booklet. Enter "999" if a seed product was purchased but is not listed. Enter "-1" if the product is not known.].....		Code 2343

The land use questions were changed from:

23. In 2023, did your land-use practices for this field include any of the following---

1	2	3	4
LAND-USE PRACTICE	Was this practice used?	What year was this practice first used?	Was (or will there be) an incentive or cost-share received from: 1 Environmental Quality Incentives Program (EQIP)? 2 Conservation Security or Conservation Stewardship Programs (CSP)? 3 Conservation Reserve Program (CRP)? 4 Any other Federal, State, Local or non-government source?
	YES = 1	YEAR	CODE
a. Terraces.	1420	1441 __ __ __ __	1451
b. Grade stabilization structures.	1422	1442 __ __ __ __	1452
c. Grassed waterways.	1438	1443 __ __ __ __	1453
d. Structures for water control basins.	1424	1444 __ __ __ __	1454
e. Filter strips.	1426	1445 __ __ __ __	1455
f. Field borders.	1427	1446 __ __ __ __	1456
g. Riparian buffers (i.e., grass buffers).	1428	1447 __ __ __ __	1457
h. Contour farming and strip cropping.	1434	1448 __ __ __ __	1458
i. Conservation tillage / no-till.	1437	1449 __ __ __ __	1459

To

29. [Now I need information on soil, crop, and land management practices or activities used on the selected field and any financial assistance you may have received in conjunction with those practices.]

a. Please check any practices or activities that you used on the selected field this year or any time in the past.

On-field Soil and Crop Management		10 <input type="checkbox"/> Terraces	30 <input type="checkbox"/> Implement an integrated pest management plan – written plan
1 <input type="checkbox"/> No-till/strip-till	12 <input type="checkbox"/> Grass waterway	31 <input type="checkbox"/> Drift reducing spray nozzles	
2 <input type="checkbox"/> Conservation tillage except no-till/strip-till	20 <input type="checkbox"/> Implement a nutrient management plan – written plan.	32 <input type="checkbox"/> Targeted sprayer – electrical control	
3 <input type="checkbox"/> Cover crop – single species	21 <input type="checkbox"/> Precision nutrient application	Adjacent to Field	
4 <input type="checkbox"/> Cover crop mix	22 <input type="checkbox"/> Subsurface phosphorous application	33 <input type="checkbox"/> Filter strip	
5 <input type="checkbox"/> Contour farming	23 <input type="checkbox"/> No fertilizer application more than 30 days before planting	34 <input type="checkbox"/> Field border	
6 <input type="checkbox"/> Conservation crop rotation	24 <input type="checkbox"/> Controlled release or enhanced efficiency fertilizer	35 <input type="checkbox"/> Riparian buffer – grass or forest	
7 <input type="checkbox"/> Laser leveling	26 <input type="checkbox"/> Split nitrogen application with at least 50% applied after planting	50 <input type="checkbox"/> Irrigation water management plan	
		99 <input type="checkbox"/> None of the above	

b. For each practice or activity checked in 29a, please complete one line of this table.

[Enumerator Note: If "99:None of the above" was selected, report code "99" in the first row (item 1610).]

1 Practice or Activity on the Selected Field	2 Practice Code (see item 29a) Code	3 Was this practice or plan used on this selected field in 2023? 1 Used in 2023 2 Not used in 2023 but used in earlier years Code	4 What financial assistance (cost share) has been received for this practice on this field? 1 Received a payment in 2023 from EQIP, CSP, or similar program 2 Did not receive a payment in 2023 but have in earlier years 3 Have never received a payment for this practice Code	5 Does this practice or activity help satisfy-- 1 A federal, state, or local regulatory requirement 2 Highly erodible land conservation compliance 3 Does not relate to any regulation or compliance requirement Code
	1610	1614	1612	1613
	1615	1619	1617	1618
	1620	1624	1622	1623
	1625	1629	1627	1628

Item 26 and table – Removed.

The following questions were added:

		<div style="border: 1px solid black; padding: 2px; display: inline-block;"> 1 Loam 2 Clay 3 Sandy 4 Mixed 5 Silty </div>	Code
24. What is the primary soil type of the selected field?.....			2401
25. In the selected field, are any of the following currently or historically a concern?		Unit Code 1 Currently a concern 2 A concern in the past but not anymore 3 Not a concern	
		Code	
a. Water-driven erosion.....			2407
b. Wind-driven erosion.....			2408
c. Soil compaction.....			2409
d. Poor drainage.....			2410
e. Low organic matter.....			2411
f. Water quality.....			2412
g. Other concerns.....			2413
h. Water availability.....			2415
[If 25a – 25h are all "Not a Concern", ask—]			
i. If the answer to all of the above was "Not a Concern", is it the case that there are no significant concerns on this field?.....	Yes=1 No=3	Code	2414
26. Did the land use practices for the selected field include subsurface drainage?.....	Yes=1 No=3	Code	2402
[If 26 = 1, continue. Otherwise go to item 27.]			
a. In what year was the current subsurface (tile) drainage installed?.....		Year	2403
		Inches	2604
b. What is the average depth of your draining system?.....			2605
c. What is the diameter of your tiles?.....		Hours	2606
d. On average, how many hours does it take your field to return to normal soil moisture levels following a heavy storm?.....		Code	2406
e. Does this system include a mechanism for controlled drainage (e.g. stop logs, risers, or float mechanisms)?.....	Yes=1 No=3		
27. Has the selected field ever been in any conservation contracts for which you or your landlord received (or expected to receive) cost-sharing payments, stewardship payments, or incentive payments?			
		Unit Code 1 Current 2 Past 3 Never	
a. Environmental Quality Incentive Program (EQIP).....			2611
b. Conservation Security or Conservation Stewardship Programs (CSP).....			2612
c. Conservation Reserve Program (CRP).....			2613
d. Other Federal, State, Local or non-government source.....			2614
28. During the last four years, did you apply for conservation funding, either through any Federal, State, or local program, for the selected peanut field?.....			
	Yes=1 No=3	Code	2402

Items 29 and 32 – Removed.

The following questions were added:

b. What type of unit coverage did you purchase for the multi-peril policy on the selected field?.....	<div>1 Basic</div> <div>2 Optional</div> <div>3 Enterprise</div>	<div>Code</div> <div>2524</div>
c. In what year did you, the operator listed on the label, first purchase multi-peril crop insurance on the selected field?.....		<div>Year</div> <div>2525</div>
d. What is the 2023 Approved APH (actual production history) yield for the selected field?.....		<div>CWT per Acre</div> <div>2526</div>
e. What was the premium paid for multi-peril crop insurance for the selected field in 2023? EXCLUDE any administrative fee.....		<div>Dollars & Cents per Acre</div> <div>2527</div>
f. Did you or will you collect an indemnity payment for the selected field from multi-peril crop insurance during 2023?.....	<div>Yes=1</div> <div>No=3</div>	<div>Code</div> <div>2528</div>

Section C – Nutrient or Fertilizer Applications

There is an additional column in the “Materials Used” sub-table to collect information on the Source/Form of Nitrogen Used: Choose from

Nitrogen Codes for Column 2 Source/Form of N Used	
1 Anhydrous ammonia	6 Ammonia sulfate
2 Nitrogen solution (UAN)	7 Potassium nitrate, magnesium nitrate, and calcium nitrate
3 Urea	8 Other nitrogen fertilizer material [specify: _____]
4 Ammonium nitrate	
5 Sodium nitrate	

The following questions were added for organic matter:

7. Was a soil test for soil organic matter performed on the selected peanut field at some point in the last 10 years?.....	<div>Yes=1</div> <div>No=3</div>	<div>3225</div>
[If item 7 = 1, ask—]		
a. What was the percentage of soil organic matter on the selected field for the most recent test?.....		<div>Percent</div> <div>3226</div>
b. How many times have you tested the selected field for soil organic matter in the last 10 years?.....		<div>Number</div> <div>3227</div>
[If item 7b is more than 1, ask—]		
c. Based on these tests, is your soil organic matter content.....	<div>1 Increasing?</div> <div>2 Decreasing?</div> <div>3 Staying roughly the same?</div>	<div>Code</div> <div>3228</div>
8. Was a soil or plant tissue test performed on the selected peanut field in 2022 or 2023 for the 2023 crop?.....	<div>Yes=1</div> <div>No=3</div>	<div>Code</div> <div>0224</div>
<div>3 Some other reason</div>		
b. Did you receive a payment from a conservation program (CSP, EQIP, or other) for performing a soil or plant tissue test?.....	<div>Yes=1</div> <div>No=3</div>	<div>Code</div> <div>3231</div>
[If nitrogen inhibitors were used, continue. Otherwise go to item 15.]		
a. How much nitrogen inhibitor did you mix with the nitrogen applied to the selected field?.....	<div>Pounds per Acre</div> <div>2561</div> <div>Dollars & Cents</div>	<div>OR</div> <div>Gallons per Acre</div> <div>2562</div> <div>Dollars & Cents</div>

Item 15d – Removed.

Items 16 and 18 – Combined into a new question 16 for “manure or compost”.

Item 19 – Removed.

Section D – Biocontrol or Pesticide Applications

New Item 4a,b,c:

a. How much was spent for herbicide products applied to the selected field? INCLUDE operator, landlord, and contractor costs.....	Dollars & Cents per Acre	OR	Total Dollars
	3034		3035
b. How much was spent for insecticide products applied to the selected field? INCLUDE operator, landlord, and contractor costs.....	Dollars & Cents per Acre	OR	Total Dollars
	3036		3037
c. How much was spent for fungicide products applied to the selected field? INCLUDE operator, landlord, and contractor costs.....	Dollars & Cents per Acre	OR	Total Dollars
	3038		3039

Item 11 – Removed.

Item 13 – Removed.

Item 22 – Removed.

New questions added:

20. Was protection of beneficial organisms a factor in your pest control decisions for the selected field?.....	Yes=1 No=3	1765
[If item 20=1, continue. Otherwise go to item 21.]		
a. Did you change timing of, reduce application rate of, or eliminate a pesticide application?.....	Yes=1 No=3	1766
b. Did you change to an alternative pesticide, biocontrol, or non-pesticide practice?.....	Yes=1 No=3	1767
Unit Codes 1 Pounds 2 CWT 3 Tons 4 Bushels		
21. If untreated (either with herbicides, tillage, or cultivation), how much yield loss (e.g. bushels per acre) do you think weeds would most likely cause on the selected field?	Units per Acre	Code
	2735	2736
22. Did pests, such as weeds, insects, pathogens, or animals, cause any yield loss on the selected field in spite of your pest control efforts?.....	Yes=1 No=3	0827
[If item 22 = 1, ask—]		
a. How much yield loss per acre do you think was caused by all pests on the selected field in spite of the management practices you used to reduce those losses?.....	Units per Acre	OR Total Units
	0829	0828 0830

Section F – Field Operations

New questions added for machine purchases:

[Enumerator Action: Were machine or equipment codes reported in Question 1?]

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

2. Were any of the machines or equipment reported in Columns 2 or 3 of Question 1 purchased new during 2023?.....

Code	
Yes = 1	xxxx
No = 3	

[If item 2 = 1, continue. Otherwise go to item 3.]

1	2	3
Machine purchased new in 2023	[Record machine code from respondent booklet.] Code	Dealer's list price of the machine. (This should be the "sticker price," not including discounts or trade-in values for used machinery.) Dollars
xxxx	xxxx	xxxx
xxxx	xxxx	xxxx
xxxx	xxxx	xxxx
xxxx	xxxx	xxxx
xxxx	xxxx	xxxx

The following questions were added:

9. Were the peanuts harvested and hauled from the selected field dried (or will be dried) before it was sold or stored?.....
- | Code | |
|-------|------|
| Yes=1 | 2748 |
| No=3 | |

[If any item in 11a–g = 1, continue. Otherwise go to item 13.]

12. Were any of the technical or consultant services listed in item 11a–g provided to you at no–cost or were partially reimbursed by the Natural Resources Conservation Service (NRCS)?.....

Code	
Yes=1	2748
No=3	

[If any item in 11a–g = 1, continue. Otherwise go to item 13.]

12. Were any of the technical or consultant services listed in item 11a–g provided to you at no–cost or were partially reimbursed by the Natural Resources Conservation Service (NRCS)?.....

Code
Yes=1 2748
No=3

13. What was the cost for any technical or consultant services reported in item 10. INCLUDE operator, landlord, and contractor costs. EXCLUDE cost of soil or tissue tests or scouting costs previously reported. Do not report costs for any of these services reported above if they were previously reported as part of the cost of materials and/or application.....

Dollars & Cents per Acre	OR	Total Dollars
1136		1137

14. Please report how any data from the selected field in 2023 will be stored and accessed.

a. Did you access the data collected from the selected field on a—

Code
Yes=1 2485
No=3

i. Paper hard copy?.....

Code
Yes=1 2486
No=3

ii. Personal computer?.....

Code
Yes=1 2487
No=3

iii. Mobile device?.....

Code
Yes=1 2488
No=3

b. Did you access the data collected from the selected field through an agricultural technology provider website?.....

[If item 14b = 1, continue. Otherwise go to item 15.]

c. Did you opt out of allowing your agricultural technology provider website to share data collected from the selected field with any third party?.....

Code
Yes=1 2489
No=3

d. Did you share any of the data collected from the selected field with a third party through an agricultural technology provider website?.....

Code
Yes=1 2490
No=3

15. Were there (or will there be) any data collection tools such as yield monitors, GPS mapping, etc. used during field operations on this peanut field?.....

Code
Yes=1 2460
No=3

16. Please report the data collection technologies you used on the selected field to produce this crop.

1	2	3	4	5	6
Data Collection Tool	Tool Used Yes=1 No=3	If the tool was used—			
		Collected GPS coordinates	Data was/will be used to create a map	Replacement Cost	Annual Fee1/
		Yes=1 No=3	Yes=1 No=3	Total Dollars	Total dollars
a. Yield monitor.....	2461	2462	2463	2570	2571
b. Soil tests on core sample performed on–farm or sent out to a laboratory.....	2464	2465	2466	2572	2573
c. Soil sensor tests.....	2467	2468	2469	2574	2575
d. Hard–wired crop condition sensors.....	2470	2471	2472	2576	2577
e. Wireless crop condition sensors.....	2473	2474	2475	2578	2579
f. Aircraft or satellites.....	2445	2446	2447	2448	2449
g. Drones or Unmanned Aerial Vehicles (UAV)...	2455	2456	2457	2458	2459
h. Custom service applications – data from completed work on your field.....	2479	2480	2481	2582	2583
i. Public data downloaded from online sources.	2482	2483	2484		

1/ INCLUDE custom service fees, data subscriptions, and online tool subscriptions.

Item 10b(i) – Removed.

Items 11-14 – Removed.

New questions added:

18. Using data collected from the previous tools table in item 15, did you obtain crop management recommendations, such as data interpretation, in 2023 for the selected field from any of the following—

- a. input dealers without other fee-for-services?
- b. input dealers with other fee-for-services?
- c. custom service providers?
- d. USDA/university extension services?

Code	
Yes=1	2491
No=3	
Yes=1	2492
No=3	
Yes=1	2493
No=3	
Yes=1	2494
No=3	

[If any item 17a–d = 1, ask—]

- e. What was the cost for all of these services? INCLUDE operator, landlord and contractor costs. EXCLUDE costs for any of these services if they were previously reported as part of the costs of materials and/or application.....

Dollars & Cents per Acre	OR	Total Dollars
3150		3151

[If item 15g column 2 = 1, ask—]

19. In the selected field, did you use the UAV for any of the following purposes?

- a. Weed analysis.....
- b. Yield analysis.....
- c. Moisture analysis.....

Code	
Yes=1	3161
No=3	
Yes=1	3165
No=3	
Yes=1	3166
No=3	

20. Was any of the following GPS-enabled (Global Positioning System) equipment used to produce peanuts on the selected field in 2023?

- a. Mounted in-cab heads-up displays.....
- b. Smart phones or computer tablets.....
- c. Automatic section control, such as auto sprayer boom controls or automatic section shut offs.....

Code	
Yes=1	2155
No=3	
Yes=1	2156
No=3	
Yes=1	2165
No=3	

21. If any GPS-enabled equipment was used, what was the cost to purchase and install all GPS-enabled equipment, not including guidance auto-steering equipment? INCLUDE cost for GPS receiver and annual GPS subscription fee, and operator, landlord, and contractor costs. EXCLUDE costs for any of this equipment if they were previously reported as part of the costs of materials and/or application.....

Dollars & Cents per Acre	OR	Total Dollars
2166		2167

22. Were any automated guidance systems (i.e. auto-steer), excluding Light Bar, used on the selected field?.....

Code	
Yes=1	2148
No=3	

[If item 21 = 1 continue, otherwise go to item 21f.]

- a. Was the automated guidance system.....
- b. What year was the automated guidance system first purchased?.....
- c. What is the replacement cost for the automated guidance system?.....
- d. What is the annual fee for the automated guidance system?.....
- e. What is the primary reason you chose to use an automated guidance system? (Select all that apply.)
- xxxx ☐ Increase yields xxxx ☐ Reduce input costs xxxx ☐ Reduce operator fatigue
- xxxx ☐ Improve soil conditions (i.e. soil compaction) xxxx ☐ Technology came "standard" on my equipment xxxx ☐ Reduce environmental impacts (i.e. emissions)
- xxxx ☐ Other

1 New, owned?
2 Used, owned?
3 Leased?

Code	
Yes=1	2158
No=3	

Year	
2159	

Dollars & Cents per Acre	OR	Total Dollars
2160		2161

Dollars & Cents per Acre	OR	Total Dollars
2162		2163

[If item 21 = 3, ask—]

- f. What is the primary reason you chose not to use an automated guidance system? (Select all that apply.)
- xxxx ☐ Costs are too high relative to benefits xxxx ☐ Benefits are uncertain xxxx ☐ Too complicated to use
- xxxx ☐ Not sufficiently accurate xxxx ☐ Not suitable for my operation xxxx ☐ Other

23. Was a variable rate applicator used on the selected field?.....

Yes=1
No=3

Code 2164

[If item 22 = 1 continue, otherwise go to Section G]

Please report the variable rate applicator types you used on the selected field to produce this crop. If a particular row's variable rate applicator was not used, leave that row blank.

1 Was a variable rate applicator used on the selected field for—	2 Tool Used Yes=1 No=3	3 Was this applicator?— 1 Sensor-based 2 GPS-based 3 Both 4 Neither Code	4 Was this applicator?— 1 New, owned 2 Used, owned 3 Leased Code	5 What year was the applicator first used? Year	6 Premium paid for the applicator Total Dollars
a. seeding.....	1158	2170	2171	2172	2173
b. fertilizer/lime applications.....	1152	2174	2175	2176	2177
c. pesticide applications.....	1159	2178	2179	2180	2181
d. irrigation applications.....	1197	2182	2183	2184	2185

Section G – Irrigation

Item 8d – Removed.

New question:

9. Was any additional mainline or lateral pipe used to carry water from the source to the system in the same wells during the 2023 growing season?.....

Yes=1
No=3

Code 2211

Inches

Item 10 – Removed.

Soybean Production Practices and Cost Report

Section A – Soybean Field Selection

New questions on certified organic acres for the farm:

a. Did you produce any acres of certified organic soybeans?.....

Yes = 1
No = 3

Code XXXX

b. Of the total (item 1) acres, how many were planted using/as —

	Total Acres	Number of Fields
i. Conventional soybeans?.....	XXXX	XXXX
ii. Certified organic soybeans?.....	XXXX	XXXX

The field selection process has been updated to accommodate for Computer Assisted Personal Interview (CAPI) data collection. This allows NASDA enumerators to complete interviews by phone, if requested by the respondent.

From:

2. I will follow a simple procedure to make a random selection from the soybean fields planted for the 2023 crop.

What is the TOTAL number of soybean fields that were planted on this operation?

[If only one field enter "1" and go to item 5.]

TOTAL NUMBER OF
FIELDS PLANTED

0020

3. 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 Supplement.]

FIELD NAME, NUMBER OR DESCRIPTION	FIELD NAME, NUMBER OR DESCRIPTION
1	10
2	11
3	12
4	13
5	14

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 one field, enter 1.]

SELECTED FIELD
NUMBER

0021

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

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

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

To:

[I will follow a simple procedure to make a random selection from the soybean fields planted for the 2023 crop.]

		Total Number Of Fields Planted
2. What is the total number of soybean fields that were planted on this operation? [If only one field, enter "1" and go to item 4.].....	0020	
3. [Now, I need to identify an soybean field to be used for this survey.] The soybean field pre-selected for this interview is the:		
1 <input type="checkbox"/> Northern most field 2 <input type="checkbox"/> Southern most field 3 <input type="checkbox"/> Eastern most field 4 <input type="checkbox"/> Western most field 5 <input type="checkbox"/> Northeastern most field 6 <input type="checkbox"/> Southeastern most field 7 <input type="checkbox"/> Northwestern most field 8 <input type="checkbox"/> Southwestern most field	Field description: <div style="border: 1px solid black; height: 20px; width: 100%;"></div>	
4. The field selected is _____ (field name/number/description). During this interview, the soybean questions will be about this selected soybean field. [Be sure the operator can identify the selected field.]		

A question was added for the cost for third part certification:

[If item 1a = 1 or 2, then ask—]		Dollars & Cents per Acre
b. What was the cost, per acre, for third party organic certification?.....	1399	

Question 8a – Removed.

A new screening question was added to determine if seed was treated:

		Code
12. For the 2023 soybean crop, was the soybean seed—.....	1 Treated with a pesticide prior to purchase? 2 Treated with a pesticide after purchase? 3 Not treated with a pesticide?	3062

Items 15 and 16 – Removed.

The following questions were added about genetically modified/genetically engineered traits:

17. Did the soybeans planted on the selected field have any of the following genetically modified organism/genetically engineered (GMO/GE) traits in 2023 or the last time soybeans were planted?.....	Yes = 1 No = 3	were planted Yes = 1 No = 3 N/A = 4
a. Glyphosate tolerance (e.g. Roundup Ready®).....	2306	2307
b. Glufosinate tolerance (e.g. LibertyLink®).....	2312	2313
c. Dicamba tolerance (e.g. Xtend®).....	2310	2311
d. HPPD tolerance (e.g. Balance®, MGI).....	2330	2331
e. 2, 4-D tolerance (e.g. Enlist®).....	xxxx	xxxx
f. High-oleic soybeans (e.g. Plenish®, Vistive Gold®).....	xxxx	xxxx

18. Did the soybeans planted on the selected field have any of the following traits in 2023 or the last time soybeans were planted?.....	2023 Yes = 1 No = 3	Last time soybeans were planted Yes = 1 No = 3 N/A = 4
a. Sulfonylurea tolerance (e.g. Sulfonylurea Ready, SR, STS®, BOLT®).....	2332	2333
b. Soybean cyst nematode resistance (e.g. SCN).....	2334	2335
c. Soybean sudden death syndrome resistance (e.g. SDS).....	xxxx	xxxx
d. Phytophthora root-rot resistance (e.g. PRR).....	2336	2337
e. Aphid resistance (e.g. Rag1, Rag2).....	2338	2339

The columns were removed from the table on Item 21 (crops planted on the field previously):

- Type of Crop Grown on the Field,
- Was the field Irrigated

The table on Item 26 was reduced:

From:

26. Which of the following resource Concerns do you have on this field

RESOURCE CONCERNS	CODE YES = 1	Have you received technical assistance from any of the following sources to evaluate this resource concern? (Report up to 3 sources that you received assistance from.) 1 USDA – NRCS 2 Cooperative Extension Service 3 Other USDA staff, including Forest Service 4 Other (e.g. Soil and Water Conservation District, state agency)	
		Source 1	Source 2
a. Water-driven erosion.	2407	2417	2427
b. Wind-driven erosion.	2408	2418	2428
c. Soil compaction.	2409	2419	2429
d. Poor drainage.	2410	2420	2430
e. Low organic matter.	2411	2421	2431
f. Water quality.	2412	2422	2432
g. Other concerns.	2413	2423	2433



-8-



h. No significant concerns.	2414		
----------------------------------	------	--	--

To:

26. In the selected field, are any of the following currently or historically a concern?

- Unit Code
1 Currently a concern
2 A concern in the past but not anymore
3 Not a concern

	Code
a. Water-driven erosion.....	2407
b. Wind-driven erosion.....	2408
c. Soil compaction.....	2409
d. Poor drainage.....	2410
e. Low organic matter.....	2411
f. Water quality.....	2412
g. Other concerns.....	2413
h. Water availability.....	2415

There has been change in the questions for subsurface drainage.

From:

		CODE
		2402
27. Did the land use practices for this field include subsurface drainage?		YES = 1
[If YES, ask--]		
		YEAR
		2403
a. In what year was the subsurface drainage installed?		
		INCHES
b. What is the average width (space between rows) of your drainage system?(Feet)		XXXX
c. What is the diameter of your tiles? .(inches)		2605
		HOURS
d. On average, how many hours does it take your field to return to normal soil moisture levels following a heavy storm?		2606
e. Does this system include a mechanism for controlled drainage (e.g. stop logs, risers, or float mechanisms)?		2406
		YES = 1

To:

		Code
		2402
27. Did the land use practices for the selected field include subsurface drainage?.....		Yes=1 No=3
[If 27 = 1, continue. Otherwise go to item 28.]		
		Year
		2403
a. In what year was the current subsurface (tile) drainage installed?.....		
		Inches
b. What is the average depth of your draining system?.....		2604
c. What is the average or most common diameter of your tiles?.....		2605
		Code
d. Does this system include a mechanism for controlled drainage (e.g. stop logs, risers, or float mechanisms)?.....		2406
		Yes=1 No=3
e. Does this drainage system have surface inlets?.....		2719
		Yes=1 No=3
f. Where does this system empty?.....		2720
		Code

1 An open, single stage ditch
 2 A natural waterbody
 3 A saturated buffer
 4 A retention pond
 5 Another type of receiving system

Item 31 – The technical or planning assistance column has been removed.

Item 32 – Removed questions on private insurance.

The private insurance question were replaced with a single or named peril crop insurance policy (i.e. hail, replant, wind, freeze, etc.)

31. In 2023, were the soybeans in the selected field covered by a single or named peril crop insurance policy (i.e. hail, replant, wind, freeze, etc.)?.....

[If item 31 = 1, continue. Otherwise, go to item 32.]

a. In 2023, were the soybeans in the selected field covered by more than one single or named peril crop insurance policy (e.g. hail, replant, wind, freeze)?.....

b. What was the dollar amount of coverage per acre for the single peril policy covering the selected field?.....

c. What was the premium cost per acre for the single peril policy covering the selected field in 2023? EXCLUDE any sign-up fee.....

d. What was the percent deductible for the single peril policy covering the selected field? (Record no deductible as 0%).....

e. Did you (or will you) collect an indemnity payment for the selected field from the single peril policy during 2023?.....

The following questions were added for Federal Crop insurance:

b. What type of unit coverage did you purchase for the multi-peril policy on the selected field?.....

c. In what year did you, the operator listed on the label, first purchase multi-peril crop insurance on the selected field?.....

d. What is the 2023 Approved APH (actual production history) yield for the selected field?.....

e. What was the premium paid for multi-peril crop insurance for the selected field in 2023? EXCLUDE any administrative fee.....

f. Did you or will you collect an indemnity payment for the selected field from multi-peril crop insurance during 2023?.....

Section C – Nutrient or Fertilizer Applications

There is an additional column in the “Materials Used” sub-table to collect information on the Source/Form of Nitrogen Used: Choose from

Nitrogen Codes for Column 2 Source/Form of N Used	
1 Anhydrous ammonia	6 Ammonia sulfate
2 Nitrogen solution (UAN)	7 Potassium nitrate, magnesium nitrate, and calcium nitrate
3 Urea	8 Other nitrogen fertilizer material [specify:_____]
4 Ammonium nitrate	
5 Sodium nitrate	

A few questions on custom application of nitrogen and manure/compost were added:

j. Was the application rate of commercial nitrogen fertilizer on the selected field reduced due to manure or compost application?.....

Yes=1 0262
No=3

[If 16j = 1, ask—]

i. By what percent did you reduce the commercial nitrogen fertilizer application rate on the selected field?.....

Percent
0263

ii. Did you adjust the soybean harvest date for the selected field due to the application of manure or compost?.....

Yes=1 0280
No=3

Code

Section D – Biocontrol or Pesticide Applications

A new item 4c was added:

c. How much was spent for fungicide products applied to the selected field?.....

INCLUDE operator, landlord, and contractor costs.....

Dollars & Cents per Acre 3038

OR

Total Dollars 3039

Section E – Pest Management Practices

Item 11 (table) – Removed.

Item 25a – Removed.

New Items 25a and 25b:

25. On the selected field in 2023, did you observe symptoms associated with injury from dicamba such as leaf cupping, an increased number of nodes, or height reduction?.....

Yes=1 1974
No=3

[If item 25 = 1, continue. Otherwise go to item 26.]

a. Did you report the injury to the state or local officials?.....

Yes=1 1981
No=3

b. Was the injury investigated by state or local officials?.....

Yes=1 1982
No=3

Code

Items 32 and 33 – Removed.

Section F – Field Operations

New Items added on items purchased in 2023:

[Enumerator Action: Were machine or equipment codes reported in Question 1?]

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

2. Were any of the machines or equipment reported in Columns 2 or 3 of Question 1 purchased new during 2023?.....

Code	
Yes = 1	xxxx
No = 3	

[If item 2 = 1, continue. Otherwise go to item 3.]

1 Machine purchased new in 2023	2 [Record machine code from respondent booklet.] Code	3 Dealer's list price of the machine. (This should be the "sticker price," not including discounts or trade-in values for used machinery.) Dollars
xxxx	xxxx	xxxx
xxxx	xxxx	xxxx
xxxx	xxxx	xxxx
xxxx	xxxx	xxxx
xxxx	xxxx	xxxx

Item 7g – Removed.

New Item added:

[If any item in 11a–g = 1, continue. Otherwise go to item 13.]

12. Were any of the technical or consultant services listed in item 11a–g provided to you at no–cost or were partially reimbursed by the Natural Resources Conservation Service (NRCS)?.....

Code	
Yes=1	xxxx
No=3	

Item 14(1) – Removed.

The following questions were added:

17. Using data collected from the previous tools table in item 15, did you obtain crop management recommendations, such as data interpretation, in 2023 for the selected field from any of the following—

	Code
a. input dealers without other fee-for-services?.....	Yes=1 2491 No=3
b. input dealers with other fee-for-services?.....	Yes=1 2492 No=3
c. custom service providers?.....	Yes=1 2493 No=3
d. USDA/university extension services?.....	Yes=1 2494 No=3

[If any item 17a–d = 1, ask—]

e. What was the cost for all of these services? INCLUDE operator, landlord and contractor costs. EXCLUDE costs for any of these services if they were previously reported as part of the costs of materials and/or application.....

Dollars & Cents per Acre	OR	Total Dollars
3150		3151

28

[If item 15g column 2 = 1, ask—]

18. In the selected field, did you use the UAV for any of the following purposes?

	Code
a. Weed analysis?.....	Yes=1 3161 No=3
b. Yield analysis?.....	Yes=1 3165 No=3
c. Moisture analysis?.....	Yes=1 3166 No=3

19. Was any of the following GPS-enabled (Global Positioning System) equipment used to produce soybeans on the selected field in 2023?

	Code
a. Mounted in-cab heads-up displays?.....	Yes=1 2155 No=3
b. Smart phones or computer tablets?.....	Yes=1 2156 No=3
c. Automatic section control, such as auto sprayer boom controls or automatic section shut offs?.....	Yes=1 2165 No=3

e. What is the primary reason you chose to use an automated guidance system? (Select all that apply.)

xxxx <input type="checkbox"/> Increase yields	xxxx <input type="checkbox"/> Reduce input costs	xxxx <input type="checkbox"/> Reduce operator fatigue
xxxx <input type="checkbox"/> Improve soil conditions (i.e. soil compaction)	xxxx <input type="checkbox"/> Technology came "standard" on my equipment	xxxx <input type="checkbox"/> Reduce environmental impacts (i.e. emissions)
xxxx <input type="checkbox"/> Other		

[If item 21 = 3, ask—]

f. What is the primary reason you chose not to use an automated guidance system? (Select all that apply.)

xxxx <input type="checkbox"/> Costs are too high relative to benefits	xxxx <input type="checkbox"/> Benefits are uncertain	xxxx <input type="checkbox"/> Too complicated to use
xxxx <input type="checkbox"/> Not sufficiently accurate	xxxx <input type="checkbox"/> Not suitable for my operation	xxxx <input type="checkbox"/> Other

Item 17: A new row was added for "irrigation applications"

Fruit Chemical Use Survey – CA Version

Section C –Fertilizer Applications

New questions on the fertilizers applied to bearing acres for the target commodity.:

8

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 Crop	2 Crop Code	3 N I T R O G E N	4 P H O S P H A T E P ₂ O ₅	5 P O T A S H K ₂ O	6 S U L F U R S	7 How much was applied per acre per application? [Leave this column blank if actual nutrients were reported.]	8 Unit Codes 1 Pounds 12 Gallons 13 Quarts 15 Liquid Oz. 28 Dry Oz. 19 Actual Nutrients	9 How many acres was this applied to? [Include bearing acres only] Acres	10 How many times was it applied? Number
01			31	32	33	34	36	37	40	41
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

Fruit Chemical Use Survey – Enterprise Version

Section C –Fertilizer Applications

New questions on the fertilizers applied to bearing acres for the target commodity.:

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 N I T R O G E N	4 P H O S P H A T E	5 P O T A S H	6 S U L F U R	7 How much was applied per acre per application? [Leave this column blank if actual nutrients were reported.]	8 Unit Codes 1 Pounds 12 Gallons 13 Quarts 15 Liquid Oz. 28 Dry Oz. 19 Actual Nutrients	9 How many acres was this applied to? [Include bearing acres only] Acres	10 How many times was it applied? Number
	Crop	Crop Code	N	P ₂ O ₅	K ₂ O	S				
01			31	32	33	34	36	37	40	41
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

These changes listed above will not impact the current sample size or overall respondent burden.