## AGRICULTURAL RESOURCE MANAGEMENT SURVEY

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### **CORN PRODUCTION PRACTICES AND COSTS REPORT FOR 2020**

VERSION	STATE	ID	TRACT	SUBTRACT	С-ТҮРЕ	
8			01		105	
	CONTACT RECORD					
DATE	TIME	NOTES				

#### INTRODUCTION:

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

The information you provide will be used for statistical purposes only. Your responses 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 provisions of Title V, Subtitle A, Public Law 107-347 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. You may skip any question(s) you prefer not to answer.

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 65 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.

We encourage you to refer to your farm records during the interview.	We encourage you to refer to your farm records during the interview.					
H H M M     SCREENING BOX       BEGINNING TIME     0004       [MILITARY]     0006       [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					

## **CORN FIELD SELECTION**

Α

		TOTAL PLANTED ACRES
		0050
1. <b>H</b>	low many total acres of corn did this operation plant for the 2020 crop year?	·
[If no acres were planted, review Screening Survey Information Form, make notes, then go to Item 4 on ba		
a.	Did you produce any acres of <b>CERTIFIED ORGANIC</b> corn?	1064
b.	Of the total (item 1) acres, how many were planted using/as	
	TOTAL ACRES	NUMBER OF FIELDS
	583	1065

(i)	Conventional corn?	583 •	+	1065
		730		1066
(ii)	Certified organic corn?	•	+	

I will follow a simple procedure to make a random selection from the corn fields planted for the 2020 crop.

		TOTAL NUMBER OF FIELDS PLANTED
2.	What is the TOTAL number of corn fields that were planted on this operation? [If only one field, enter "1" and go to item 4.]	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
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.]

SEL	ECTED FIELD NUMBER
0021	

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

 6. For the randomly selected field above, please provide the Farm Service Agency (FSA):
 NUMBER

 a. Farm Number.
 1070

 b. Tract Number.
 1071

 c. Field Number.
 1072

# 

## OFFICE USE OY Field Substituted

В	FIELD CHARACTERISTICSSELECTED FIELD		
1.	How many acres of corn did th	is operation plant in this field for the 2020 crop?	ACRES
	a. Are the acres in this field <b>CE</b> [ <i>If</i> <b>YES</b> , <i>continue. If</i> <b>NO</b> , <i>go</i> a	RTIFIED ORGANIC?       YES         to item 2.]	CODE 1300 = 1 DOLLARS & CENTS 1891
2.	<ul> <li>b. What was the cost, per acre,</li> <li>Were the acres in this field</li> </ul>	<ul> <li>for third party organic certification?</li> <li>1 owned by this operation?</li> <li>2 rented for CASH with the payment being a fixed cash amount?</li> <li>3 rented for CASH with the payment being a flexible cash amount?</li> <li>4 rented for a SHARE of the crop?</li> <li>5 rented for some combination of CASH and SHARE of the crop?</li> <li>6 used RENT FREE?</li> </ul>	 CODE
3.	-	2 = 2, 3, or 5), ask item 3; else go to item 4.] er acre for this 2020 corn field?	DOLLARS & CENTS PER ACRE 1303 
4.	[ <i>If field is SHARE RENTED</i> (item What was the landlord's share	a 2 = 4 or 5), ask ] of the crop from this field?	<b>PERCENT</b> 1304

5. [If field is RENTED (item 2 = 2, 3, 4, or 5), ask---]

	What was the total cost for all inputs provided by any landlord for the 2020 crop on the selected field? ( <i>Include the costs for all inputs</i> ,	DOLLARS & CENTS PER ACRE	OR	TOTAL DOLLARS
	such as seed, fertilizer, chemicals, technical services, custom operations, drying and irrigation. Exclude real estate tax expenses and lime costs paid by the landowner.)	1305 •		1306
6.	What was the total cost for all inputs provided by any contractor for the 2020 crop on the selected field? ( <i>Include the costs for all inputs</i> ,	DOLLARS & CENTS PER ACRE	OR	TOTAL DOLLARS
	such as seed, fertilizer, chemicals, technical services, custom operations, drying and irrigation.).	·		1510
				YEAR
7.	What year did you (the operator listed on the label) start operating this field?			1312

## FIELD CHARACTERISTICS .... SELECTED FIELD

			MM DD YY
			1308
8. On what date was this field planted?			·
			UNIT CODES
			1 Pounds 2 CWT
		UNITS PER ACRE	3 Tons 4 Bushels
	Г	01113 PER ACRE	0217
a. What was your yield goal at planting for this field?		·	0217
	1 Grain		
9. Was the corn on this field planted	2 Silage		CODE
with the intention of being harvested as	4 Seed ···· 25 Other		3327
	· •		UNIT CODE
			1 = Pound 2 = CWT
			4 = Bushel
		DOLLARS &	22 = Acre 23 = Approx. 80,000
		CENTS PER UNIT	Kernel Bag
10. What was the total cost per unit (including operator, landlord, and c		f 1319	1320
purchased seed for this field? (Include cost of seed treatment and see fee.)	ed technology		
·····			—
			INCHES
			1322
11. What was the average corn row width for this field?	••••••	••••	
			UNIT CODE
			1 = Pounds/Acre
			2 = CWT/Acre 4 = Bushels/Acre
			25 = Kernels-Seeds/Acre
		UNITS	38 = Kernels-Seeds/Foot
12. What was the seeding/planting rate per acre for this field? (If the field report the seeding rate for the initial planting.)	eld was replanted,	1313	1314
		·	—
			ACRES
13. How many acres in this field had to be replanted to corn?			1315
(Acres replanted = Number of acres $x$ Number of times replanted)			····

2020 YES = 1	2019 YES = 1 N/A = 4 (No Corn in Field)
2300	2301

# 14. Did you plant GMO/GE seeds for the 2019 or 2020 crop years? . . . . . . . . . .

25. Please report what seed products were used in previous years.

		What seed product was used
		this year
		[Show product codes from
	Seed Product Name	Respondent Booklet.]
2020		
2019		
2018		
2017		
2016		

15. Did the CORN planted on this field have any of the following GMO/GE traits in 2019 or 2020?	2020 YES = 1	2019 YES = 1
a. Insect Resistance (Bt) to Corn Borer	2501	2502
(i) With multiple (pyramided) modes of action	2503	2504
b. Insect Resistance (Bt) to Rootworm	362	363
(i) With multiple (pyramided) modes of action	2507	2508
c. Insect Resistance (Bt) to Earworm	2509	2510
d. Insect Resistance (Bt) to Armyworm	2511	2512
e. Other BT Trait	2513	2514
	2306	2307
	2308	2309
g. Herbicide Tolerance (HT) to 2, 4-D.	2310	2311
h. Herbicide Tolerance (HT) to Dicamba.	2312	2313
i. Herbicide Tolerance (HT) to Glufosinate	2514	2315
j. Other HT Trait	2515	2516
k. Drought Resistance		2010
I. Enzyme technology for ethanol (e.g. Enogen)		

**Note:** Any genetically modified organism/genetically engineered HT trait other than Glyphosate tolerance, 2,4-D tolerance, Dicamba Tolerance, or Glufosinate Tolerance should be accounted for using the "Other HT train" column.

	2020 YES = 1	2019 YES = 1 N/A = 4 (No Corn in Field)
16. Was a non-GMO/GE seed planted in.	2316	2317
[If item 16=1 for either year, continue. Else, go to 19.]		
17. Was this non-GMO/GE seed herbicide tolerant in	2318	2319

18.	Was the corn from this field sold (or will it be sold) through a market specifically for	2518	2519
	non-genetically modified corn?		

19. Wa	is the CORN planted on this field drought tolerant?		CODE
	<b>YES</b> - [ <i>Enter code 1 and continue</i> ] <b>NO</b> - [ <i>Go to item 21</i> ]		
a.	Were these GMO/GE drought-tolerant seeds (e.g., Genuity® DroughtGard®)?	<b>YES</b> = 1	
b.	Were these non-GMO/GE drought-tolerant seeds (e.g., Optimum® AQUAmax®, Agrisure Artesian <sup>®</sup> )?	<b>YES = 1</b>	
c.	Since the time that drought-tolerant corn became available in your area, when planting corn, have you only planted drought-tolerant corn varieties?	<b>YES</b> = 1	

20. Was the decision to plant drought-tolerant corn on this field based on (enter code 1 for all that apply) –

		CODE
	RESOURCE CONCERNS	
		YES = 1
a.	Ability to bundle with one or more GMO/GE traits (e.g., insect resistance)?	
b.	Price of this seed relative to seeds without drought tolerance?	
C.	Price of irrigation water and/or irrigation water applications?	
d.	Soil moisture is usually low due to frequent droughts?	
e.	Field conditions other than soil moisture or seasonal forecasts at planting time?	
f.	Drought last year that at least partially damaged last year's crop?	
g.	Concerns about changing growing conditions?	

### 21 Did you use a genetically engineered, insect resistant seed variety for the 2020 crop?

**YES = 1** 2326

[If item 21is yes, ask--]

a. Did you choose the resistant seed variety used on this field primarily to--

	<ol> <li>Increase yields through improved pest (weed or insect) control?</li> <li>Decrease pesticide input costs?</li> <li>Save management time or labor or improve ease of management?</li> <li>Reduce refuge requirements</li> <li>For some other reason(s)? [Specify]</li> </ol>		<b>CODE</b> 2327
	Was this a refuge-in-the-bag product?	YES = 1	
[If item 2	1 = YES continue. Else go to item 23.]		PERCENT
	a refuge for insect pests planted on this field [If item 22 is yes, ask, Else go	to item DD]	2328
	mply with Bt corn insect resistance management guidelines?		
a. V	Within this field		

	b.	DD. How many acres adjacent to, or as a separate block within ½ mile, of the selected field did you plant with conventional seeds as a refuge?		
23.	Did	you purchase seed treated with		CODE
	a.	a fungicide (e.g., Trilex, Allegiance, or other seed treatments)?	YES = 1	2320
	b.	an insecticide (e.g., Poncho, Gaucho or Cruiser seed treatment)?	YES = 1	2322
	c.	a nematicide (e.g., Acceleron or Avicta seed treatment)?	YES = 1	2321

UNITS PER ACRE

CODE

23. What was the difference in yields in the Bt crop with the yields in the non-bt refuge crop?	2670		
24. List the name of the seed treatment product. [ <i>If item 21a, 21b, or 21c is YES, ask</i> –	<ul> <li>–] Enter the</li> </ul>	Γ	2325

appropriate product code from the Respondent Booklet, Page 2. (Enter 3 if a seed treatment was not applied, 999 if a seed treatment was applied but the product is not listed.)..... [If item 21b is YES, ask--] CODE 2323 26. Did you use an "air delivery" or "vacuum (pneumatic) planter"? **YES = 1** [If item 23 is YES, ask--] CODE 2324 a. Did you use a talc and/or graphite seed flow lubricant?..... **YES = 1** b. Did you use an alternative seed flow lubricant (e.g. Bayer Fluency Agent) instead of talc 2394 and/or graphite?.... **YES = 1** 

		CODE
27. Has harvest of this field been completed?	YES = 1	1328

# 28. Please report the following information about the acres harvested (or to be harvested) and the yields from this field.

How many acres in this corn field were (or will be)	ACRES	1 What yield per acre did you (or do you expect to) get for Corn UNITS PER ACRE	2 UNIT CODE 1 Pounds 2 CWT 3 Tons 4 Bushels
	ACRES	UNITS PER ACRE	0005
a. harvested for grain, first crop?	1346	1347	1348
b. harvested for silage or green chop?	1349	1350	TONS
c. harvested for seed?	1431 .	1432	1433
d. abandoned?	1351 .		
e. used for some other purpose?	1439		

			CODE
29. Were	the stalks/stover harvested from this field	d?	1754
YE	<b>S</b> - [Enter code 1 and go to item 27]	<b>NO</b> - [Ask 26a, then go to item 28]	
		1 No market/use for corn stalks/stover	
	[If the corp stalls/stayor wars not	2 Harvesting was not profitable	
a.	[If the corn stalks/stover were not harvested, ask]	3 The corn stalks/stover were left as organic matter for the soil	
	What was the primary reason for not harvesting the corn stalks/stover?	4 The stalks/stover were left for livestock grazing	<b>CODE</b>
	0	5 The stalks/stover were used for animal bedding _	
		6 Other [Specifier ]	

	ACRES
30. How many acres of corn stalks/stover were harvested from this corn field?	1755
	·

	TOTAL TONS
	1756
a. How many <b>tons</b> of corn <b>stalks/stover</b> were harvested from these corn acres ( <i>item 27</i> )?	
$\overline{\text{Tons per Acre}} \times \overline{\text{Acres}} = \overline{\text{Total Tons}} \text{ OR } \overline{\text{Bales}} \times \overline{\text{Lbs per Bale}} \div 2000 = \overline{\text{Total Tons}}$	IS

		CODF
		1023
31.	Did any livestock graze this corn field after harvest of the 2020 corn crop?	
	<b>YES</b> - [ <i>Enter code 1 and continue</i> ] <b>NO</b> - [ <i>Go to item 30</i> ]	
	1 Cattle	CODE
	2 Sheep	1024
32.	. What type of livestock grazed this corn field	1024
	after harvest of the 2020 corn crop?	
		HEAD
		1027
	a. About how many head of livestock ( <i>item 28</i> ) grazed this corn field?	
		DAYS
		1028
	b. How many <b>days</b> did this livestock graze on this corn field?	
		CODE
22	Was any of the residue from the prior crop (corn stover, wheat straw, etc.) removed	
55.	post-harvest?	Yes=1
[ <i>lf</i> )	yes, ask]	
		TONS
34.	How many tons per acre of residue were removed through harvest?	1328
		HEAD
		1362
	a. About how many <b>head</b> of cattle grazed the residue?	
		DAYS
		1363
	b. How many <b>days</b> did cattle graze on the residue?	
	c. How many days did any other livestock graze the residue?	

CROP CODE LIST for item 35 – PREVIOUSLY PLANTED CROPS							
190	Barley	3	Dry Beans	21	Rice	193	Tobacco, burley
85	Canola	17	Dry Peas	22	Rye	196	Tobacco, flue cured
310	Clover	311	Grasses other than clover	98	Safflower	42	Vegetables
6	Corn for grain	1	Hay, alfalfa	25	Sorghum for grain	163	Wheat, durum
5	Corn for silage	11	Hay, all other	24	Sorghum for silage	164	Wheat, other spring
282	Cotton, Pima	94	Mustard Seed	26	Soybeans	165	Wheat, winter
281	Cotton, Upland	15	Oats	28	Sugarbeets	321	Perrennial from previous year
302	CRP	16	Peanuts	30	Sunflowers	318	No crop planted
320	Cultivated Fallow	20	Potatoes	31	Sweet Potatoes		during this period

### 35. Please report what crops were previously PLANTED on the majority of this field, including cover crops.

	1			2	3	4	5	6
What type of crop was grown on this field? 1 GE Herbicide Tolerant (HT) 2 GE Insect Resistant (Bt) 3 Stacked (HT and BT) 4 GE or Non-GE drought tolerant 5 Not GE				Was this a cover crop?	How did you manage this cover crop?	Was this field irrigated?	Was this field no-tilled or strip- tilled? 1/	
	SEASON AND YEAR	CROP NAME	CROP CODE		YES = 1	<ol> <li>Plowed-in</li> <li>Chiceled-in</li> <li>Chemical-</li> <li>Rolled</li> <li>Grazed</li> <li>Harvested</li> <li>Disked</li> </ol>	YES = 1	<b>YES</b> = 1
a.	SPRING/SUMMER of	Corn		Needs a p	Grey this	Grey this out	Needs a p	Needs a p
a.	FALL of 2019?		1343	000	1470	1471	2344	1345
b.	SPRING/SUMMER of 2019?		1369		1472	1473	2370	1371
c.	FALL of 2018?		1372		1474	1475	2373	1374
d.	SPRING/SUMMER of		1375		1476	1477	2376	1377
e.	FALL of 2017?		1378		1478	1479	2379	1380
f.	SPRING/SUMMER of		1381		1480	1481	2382	1383
g.	FALL of 2016?		1366		1482	1483	2367	1368
h.	SPRING/SUMMER of		1340		1484	1485	2341	1342
1/	No-till means leaving soil an	d previous crop resid	ue undisturbe	ı ed from har	⊥ vest to planti	ng. Strip-till mear	s tilling a narr	ow strip

No-till means leaving soil and previous crop residue undisturbed from harvest to planting. Strip-till means tilling a narrow strip over the row, leaving soil and previous crop residue between the rows undisturbed.

**DOLLARS &** 

CENTS PER ACRE

1468

[If a cover crop was planted in Spring/Summer/Fall 2020, ask--]

i. What was the seed cost per acre for the cover crop?.....

	Conservation Practice/Conservation Plan List for question 36								
328	Conservation Crop Rotation	590	Nutrient management	332	Contour Buffer Strips				
329	No-Till/Strip-Till	???	Livestock Waste Management	386	Field Border				
345	Reduced (Conservation) Till	595	Integrated Pest Management	393	Filter Strip				
330	Contour Farming	449	Irrigation Water Management	412	Grassed Waterway				
340	Cover Crop			410	Grade Stabilization Structure				
585	Strip cropping			603	Herbaceous Wind Barriers				
				600	Terraces				

36. List all conservation practices or plans that were used on this field over the past 5 years.

Have you ever received at any time--

What conservation practices have been used on this field at least once in the past 5 years?

Was this practice or plan used in 2020? Technical or planning assistance? Financial assistance? Does this practice or plan help satisfy?

1

2

3

USDA including funding of Technical Service Providers

Other Sources of Outside Assistance

No Assistance Needed 1 2 3 4 5 EQIP CSP CRP Other No Assistance Needed 1

A federal regulatory requirement?

USDA conservation compliance provisions?

Does not relate to any regulation or compliance requirement.

CODE
YES = 1
CODE
CODE
CODE

0706 0726 0736 0746	
0707 0727 0737 0747	
0708 0728 0738 0748	
0709 0729 0739 0749	
0702 0722 0732 0742	
0703 0723 0733 0743	
0704 0724 0734 0744	

37. Is this field included in an existing conservation program contract through any of the following programs for which you or the landlord have received (*or expect to receive*) cost sharing payments, stewardship payments, or incentive payments?

		-			
		1	2	3	4
PROGRAM		1/	How many practices or practice enhancements are included in the contract?	Does the contract include livestock related practices?	During the past 4 years, was this field included in an application that was rejected or has not yet been funded?
		<b>YES = 1</b>	NUMBER	YES = 1	YES = 1
a.	Environmental Quality Incentive Program (EQIP)	2236	2237	2238	2239
b.	Conservation Security or Conservation Stewardship Programs (CSP)	2240	2241	2242	2243
C.	Conservation Reserve Program (CRP)	2244	2245	2246	2247
d.	Other Federal, State, Local or non- government source	2248	2249	2250	2251

<sup>1/</sup> [Include conservation program contracts that provide assistance for grass waterways, filter strips, riparian buffers, or similar practices on or adjoining this field.]

#### 

[If item 37=1, go to Item 38-- if not, skip to question 40.]

38. Is this field (or has this field been) included in a conservation program contract through any of the following programs, for which you or your landlord received (or expect to receive) cost-sharing payments, stewardship payments, or incentive payments?

a. Environmental Quality Incentives Program 1=current contract 2=past contract	
b. Conservation Stewardship Program 1=current contract 2=past contract	
c. Conservation Reserve Program 1=current contract 2=past contract	
d. Other Federal, State, Local or non-government source 1=current contract 2=past contract	

44. What is the slope of this field?	Nearly level (0 - 2%)		CODE
	Even, moderate grade (3 – 9%) Variable, moderate grade		2400
	Even, steep grade (over 10%) Variable, steep grade		
	, unuble, steep Stude		_

	Loam	CODE
45. What is the primary soil type of this field?	Clay Sandy Mixed	 2401

		CODE
46. 1	Did the land use practices for this field include subsurface drainage? YES = 1	2402
[	If YES, ask]	YEAR
a	. In what year was the subsurface drainage installed?	2403
		INCHES
b.	What is the average depth of your drainage system?	2604
c.	What is the diameter of your tiles?	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)?YES = 1	2406

### 47. Report up to 3 sources that you received assistance from for each resource concern.

RESOURCE CONCERNS	CODE	<ul> <li>Have you received technical assistance from any of the follo sources to evaluate this resource concern? (Report up to sources that you received assistance from.)</li> <li>1 USDA – NRCS</li> <li>2 Cooperative Extension Service</li> <li>3 Other USDA staff, including Forest Service</li> <li>4 Other (e.g. Soil and Water Conservation District, sagency)</li> </ul>				
	YES = 1	Source 1	Source 2	Source 3		
a. Water-driven erosion	2407	2417	2427	2437		
b. Wind-driven erosion	2408	2418	2428	2438		
c. Soil compaction	2409	2419	2429	2439		
d. Poor drainage	2410	2420	2430	2440		
e. Low organic matter	2411	2421	2431	2441		
f. Water quality	2412	2422	2432	2442		
g. Other concerns	2413	2423	2433	2443		
h. No significant concerns	2414	2424	2434	2444		

48.	Was the corn in this field covered by private crop insurance			CODE
	in 2020 (hail, wind, freeze, etc.)?          YES – [Enter code 1 and continue]       NO – [Go to Section C]			1393
		DOLLARS & CENTS	0.0	
	Atheters the dellar amount of courses for the aximpto inclusion relieve coursing	PER ACRE	OR	TOTAL DOLLARS
	a. What was the dollar amount of coverage for the private insurance policy covering this field in 2020?			
		1205		1300
	b. What was the premium paid for private crop insurance for this field in 2020? ( <i>Exclude any sian-up fee.</i> )	1395 •		1396
				PERCENT
	c. What was the percent deductible for the private crop insurance policy covering th deductible as 0%)	s field? (Record no		
				CODE
	d. Did you (or will you) collect an indemnity payment for this field			1394
	from private crop insurance during 2020?	YE	S = 1	
49.	Was the corn in this field covered by Federal Crop Insurance in 2020?			CODE
	□ YES – [Enter code 1 and continue.] □ NO – [Enter code 3 and go to Section C.].			1385
				0005
	1 Federal CAT (basic catastrophic insu 2 Yield protection	-		<b>CODE</b>
ä	a. Which coverage did you obtain? 3 Yield plus SCO (supplemental covera 4 Revenue protection	· · · · · · · · · · · · · · · · · · ·	• •	
	5 Revenue plus SCO (supplemental co 6 Other Federal Crop insurance	verage option)		
	i. [If item 49a = 2 or 3, ask]			PERCENT
	What was your yield level of your buy-up coverage for this field?			1387
	What was your price level of your buy-up coverage for this field?			1388
	ii. [If item 49a = 4 or 5, ask]			PERCENT
				1389
	What was the level of revenue coverage you obtained for this field?		· · ·	CODE
I	b. What type of unit coverage did you purchase for this field? (Basic = 1, Option	iai = 2, Enterprise =	- 3).	CODE
c. In	what year did you (the operator listed on the label) first enroll this field			YEAR
	in the Federal crop insurance program?.			
(	d. What is the 2020 Approved APH (actual production history) yield for this field?.			BUSHELS PER ACRE
				DOLLARS &CENTS PER
(	e. What was the premium paid for Federal crop insurance for this field in 2020? ( <i>Exclude</i> any sign-up fee.).			ACRE or TOTAL DOLLARS
f. Dic	you (or will you) collect an indemnity payment for this field			CODE Yes = 1
	from federal crop insurance during 2020?			

# NUTRIENT or FERTILIZER APPLICATIONS----SELECTED FIELD

С

С

							CODE		EDIT TABLE	
1.	Were commercial nutrients or fertilizers applied to this field for the         2020 corn crop? (Include those from operators, landlords, and         contractors.)					02 YES = 1	202	1	0200	
	[If COMMERCIAL nutrient or fertilizer applied, continue; else go to item 6.]									NUMBER
2.					pplications were by airplanes and					0203
3.	Now I need	l to record i	nformation	for each ap	plication.					
		Cł	IECKLI	ST	1					
İΠ	INCLUDE			EXCLUDE	İ					
	Custom appl fertilizers	ied nutrients a	and	Micronutrients						
	Nutrients or	fertilizers appl	ied	Unprocessed	manure					
i	in the fall of 2 those applied was fallow in	d earlier if this		Nutrients or fe to previous cro	rtilizers applied pps in this field					
	Commerciall or compost	y prepared m	anure	Lime and Gyp	sum/landplaster	Office U Lines in T		BLE 02 01	299	
	2 Broadcas 3 Broadcas				, ground witho , ground with i	•	6 Cł		ected or knifed in	
					4 In seed fur	•				n or over row lirected spray
		;	2			•	5	8 Fc		
L I N E	pound	MATERIA nter percentage ls of plant nutrie	LS USED analysis or ac ents applied pe	r acre.]	4 In seed fur	4 [Enter material code.] 1 Pounds 12 Gallons 19 Pounds of actual	5 When wa this applie 1 In the fall before see 2 In the sprir before see 3 At seeding	8 For as How ed? Happl ding [Ref ng code ding abo	oliar or d	lirected spray
I N	pound	MATERIA nter percentage ls of plant nutrie	LS USED analysis or ac ents applied pe utrients or Ferti	r acre.]	4 In seed fur 3 What quantity was applied per acre? [Leave this column blank if actual pounds of nutrients	4 [Enter material code.] 1 Pounds 12 Gallons 19 Pounds	When wa this applie 1 In the fall before see 2 In the sprin before see	8 For as ed? ding ng ding labo	6 7 was his lied? fer to e list	T T How many acres were treated in this
I N	pound [Sho Nitrogen	MATERIA Inter percentage Is of plant nutrie DW Common Nu in Respond	ALS USED analysis or ac ents applied pe- utrients or Fertil ent Booklet.] K20	r acre.] iizers <b>S</b>	4 In seed fur 3 What quantity was applied per acre? [Leave this column blank if actual pounds of nutrients	4 [Enter material code.] 1 Pounds 12 Gallons 19 Pounds of actual	When wa this applie 1 In the fall before see 2 In the sprin before see 3 At seeding	8 For as ed? ding ng ding labo	oliar or d 6 / was his lied? fer to e list ove.]	7 How many acres were treated in this application?
I N E	Nitrogen	MATERIA Inter percentage Is of plant nutrie ow Common Nu in Respond P2O5 Phosphate	ALS USED analysis or ac ents applied pe itrients or Fertii ent Booklet.] K20 Potash	r acre.] izers Sulfur	4 In seed fur 3 What quantity was applied per acre? [Leave this column blank if actual pounds of nutrients were reported.]	4 [Enter material code.] 1 Pounds 12 Gallons 19 Pounds of actual nutrients	When wa this applie 1 In the fall before see 2 In the sprin before see 3 At seeding 4 After seeding	8 For as How ed? Happl ding [ <i>Ref</i> abo ng abo	oliar or d 6 / was his lied? fer to e list bve.]	T T How many acres were treated in this application?
I N E 01	Nitrogen	MATERIA Inter percentage Is of plant nutrie ow Common Nu in Responde P2O5 Phosphate 32	ALS USED analysis or ac ents applied pe trients or Fertii ent Booklet.] K20 Potash 33	r acre.] izers Sulfur 34	4 In seed fur 3 What quantity was applied per acre? [Leave this column blank if actual pounds of nutrients were reported.] 36	4 [Enter material code.] 1 Pounds 12 Gallons 19 Pounds of actual nutrients	When wa this applie 1 In the fall before see 2 In the sprin before see 3 At seeding 4 After seeding 38	8 For as ed? ding ding ng abo 39	oliar or d 6 / was his lied? fer to e list ove.]	T T How many acres were treated in this application? ACRES
I N E 01	Nitrogen	MATERIA Inter percentage Is of plant nutrie ow Common Nu in Responde P2O5 Phosphate 32 32	ALS USED analysis or ac ents applied pe trients or Fertii ent Booklet.] K20 Potash 33 33	r acre.] izers Sulfur 34 34	4 In seed fur 3 What quantity was applied per acre? [Leave this column blank if actual pounds of nutrients were reported.] 36 36	4 [Enter material code.] 1 Pounds 12 Gallons 19 Pounds of actual nutrients 37 37	When wa this applie 1 In the fall before see 2 In the sprin before see 3 At seeding 4 After seeding 38 38	8 For as ed? ding ding ding ing 39 39	oliar or d	To the series of
I N E 01 02 03 04	Nitrogen	MATERIA Inter percentage is of plant nutrie ow Common Nu in Respond P2O5 Phosphate 32 32 32	ALS USED analysis or ac ents applied pe- utrients or Fertilent Booklet.] K20 Potash 33 33	r acre.] izers Sulfur 34 34 34	4 In seed fur 3 What quantity was applied per acre? [Leave this column blank if actual pounds of nutrients were reported.] 36 36 36	4 [Enter material code.] 1 Pounds 12 Gallons 19 Pounds of actual nutrients 37 37 37	When we this applied the set of t	8 For as ed? ding ding ing 39 39 39	oliar or d	To the series of
I N E 01 02 03 04 05	Nitrogen 31 31 31 31	MATERIA Inter percentage ls of plant nutrie ow Common Nu in Respond P2O5 Phosphate 32 32 32 32	ALS USED analysis or ac ents applied pe- utrients or Fertilent Booklet.] K20 Potash 33 33 33 33	r acre.] izers Sulfur 34 34 34 34	4       In seed fur         3         What quantity was applied per acre?         [Leave this column blank if actual pounds of nutrients were reported.]         36         36         36         36         36         36         36	4 [Enter material code.] 1 Pounds 12 Gallons 19 Pounds of actual nutrients 37 37 37 37	When wa this applie 1 In the fall before see 2 In the sprin before see 3 At seeding 4 After seeding 38 38 38 38	8 For as ed? ding ding ding abor abor abor abor abor abor abor abor	oliar or d	The spray of the s
I N E 01 02 03 04 05	pound         pound         [Sho           N         Nitrogen         31	MATERIA Inter percentage ls of plant nutrie ow Common Nu in Respond P2O5 Phosphate 32 32 32 32 32	LS USED analysis or ac ents applied pe utrients or Fertileent Booklet.] K20 Potash 33 33 33 33 33 33	r acre.] izers Sulfur 34 34 34 34 34 34	4       In seed fur         3         What quantity was applied per acre?         [Leave this column blank if actual pounds of nutrients were reported.]         36         36         36         36         36         36         36         36         36         36	4 [Enter material code.] 1 Pounds 12 Gallons 19 Pounds of actual nutrients 37 37 37 37 37	When wa this applie 1 In the fall before see 2 In the sprin before see 3 At seeding 4 After seeding 38 38 38 38 38 38	8 For as ed? ding ding ding abor abor abor abor abor abor abor abor	oliar or d	To the series of

4.	Were any nutrients or fertilizers applied by custom applicators?         YES - [Continue]         NO - [Go to item 5]	
	a. Are you able to report the cost of nutrient or fertilizer materials and	OFFICE USE
	custom application separately?	0215
	YES - [Continue]         NO - [Go to item 5]	
	b. Excluding the cost of the nutrient or fertilizer materials, how much was spent for custom application of nutrients or fertilizers on this field? ( <i>Include</i> operator, <i>landlord</i> , <i>and</i> contractor costs. <i>Include</i> costs for sulfur and micronutrients. <i>Exclude</i> custom application of lime, gypsum, purchased manure and purchased compost.) [If material and application costs can't be separated, <b>exclude</b> them here and record the total in item 5.]	TOTAL DOLLARS
5.	What was the TOTAL COST of all nutrient or fertilizer products         applied to this field? (Include operator, landlord, and contractor costs, as         well as the costs for sulfur and micronutrients. Include materials applied to         this field if it was fallow in 2015. Exclude lime, gypsum, purchased manure         and purchased compost.)       [If custom applied and the cost of materials ONLY;         otherwise, include both the material and application costs.]	TOTAL DOLLARS
		CODE
6.	Was gypsum applied to this field for the 2020 corn crop?	0218
7.		3225
	in the last 10 years?YES = 1	
	[ <i>If item</i> 7 = 1, ask]	PERCENT
	a. What was the percentage of Soil Organic Matter on the field for the most recent test?	3226
		NUMBER
	b. How many times have you tested this field for Soil Organic Matter in the last ten years?	3227
	[If item 7b is more than 1 ask]	<b>CODE</b> 3228
	c. Based on these tests, is your Soil Organic Matter content: 2 Decreasing 3 Staying roughly the same	
7	Was a soil or plant tissue test performed on this corn field in 2019or 2020 for the 2020 crop?	
1.		
	YES [Continue.]         NO [Go to item 10.]	
	[If item 8 = 1, ask]	
	POUNDS PER ACRE	
0226	a. How many pounds of phosphorus ( <i>per acre</i> ) were recommended ( <i>by the phosphorus test</i> )?	
	CODE Was a soil test for nitrogen performed on this corn field in 2019 or 2020 for the 2020 crop?	
<b>YES</b> 0227		

#### POUNDS

#### PER ACRE

How many pounds of nitrogen (per acre) were recommended (by the nitrogen test)?..... a. 0228

#### CODE

10. Was a soil test for Soil Organic Matter performed on this corn field at some point in the last 10 years? ...... **YES = 1** 

3225

[*If item 10 = 1, ask---*]

#### PERCENT

What was the percentage of Soil Organic Matter on the field for the most recent test?..... a. 3226

#### NUMBER

CODE

How many times have you tested this field for Soil Organic Matter in the last ten years?..... b. 3227

[If item 10b is more than 1 ask---]

Based on these tests, is your Soil Organic Matter content:... c.

Increasing 4 5 Decreasing

6 Staying roughly the same

3228

a.

b.

11. Was a plant tissue test or leaf analysis for nutrient deficiency performed on this field	0229
in 2019 or 2020 for the 2020 crop?	YES = 1

	DOLLARS & CENTS PER ACRE	OR	TOTAL DOLLARS
12. How much was spent for these soil and plant tissue tests on this field in 2019 or 2020 for the 2020 crop ? [Include landlord and contractor costs.]	0230		0231

[If tests were done at no cost continue, otherwise go to Item 12b.]

- What is the reason why tests were done a. at no cost?.....
- Soil/plant tissue test costs were included in the 2 total fertilizer costs reported in item 5. 3 Some other reason.

Soil/plant tissue test provided free of charge by

dealer, crop consultant, or extension service.

3231

0232

CODE

b. Did you receive a payment from the Conservation Stewardship Program for performing a stalk or leaf tissue test for nitrogen application?..... **YES = 1** 

1

[ENUMERATOR ACTION: Refer to the Fertilizer Table, column 2. If nitrogen (N) was applied, complete item 13. If NO nitrogen applied, go to item 14.]

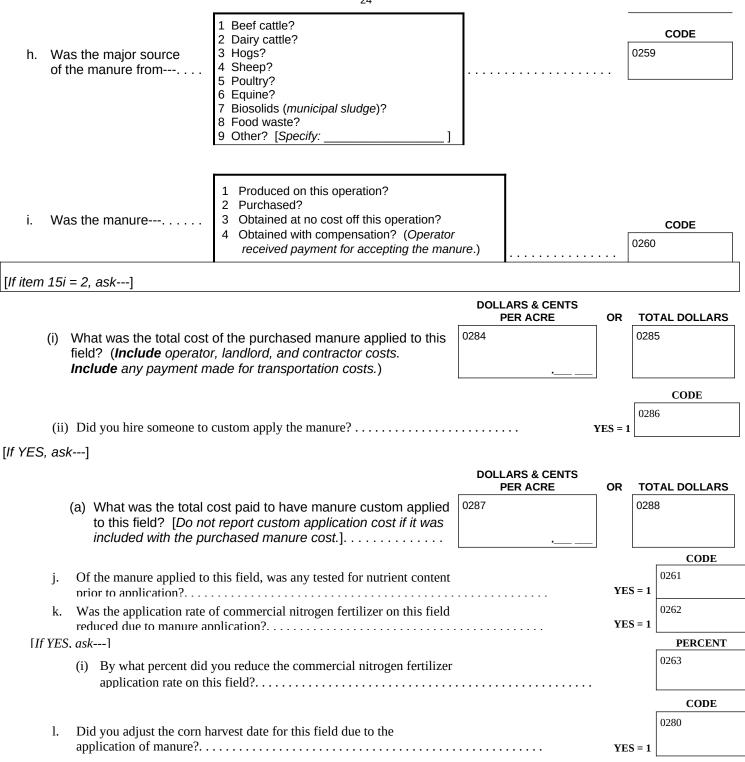
13.	Was the amount	of nitrogen	you decided to	apply to tl	his field based on
-----	----------------	-------------	----------------	-------------	--------------------

#### CODE 0233 Results of a soil or plant tissue test?..... YES = 10234 Crop consultant recommendation?.... **YES = 1**

C.	Fertilizer dealer recommendation?	YES = 1	0235
d.	Extension Service recommendation?	YES = 1	0236
e.	Cost of nitrogen and/or expected commodity price?	YES = 1	0237
f.	Contractor recommendation?	YES = 1	0238
g.	Routine practice (operator's own determination based on past experience. vield goal. etc.)?	YES = 1	0239

I

	CODE
14 to lines every emplied to this field.	0242
14. Is lime ever applied to this field?	= 1
[If no lime applied, go to item 15; else continue.]	YEARS
a. On average, how many years are there between applications of <b>lime</b> to this field?	. 0243
	TONS PER ACRE
h	0244
b. How many tons of <b>lime</b> were applied per acre the last time it was applied to this field?	
	<b>CODE</b>
c. Was lime applied to this field in 2019 or 2020 for the 2020 crop?	
[If field is rented (Section B, item 2 = 2, 3, 4, or 5), ask]	PERCENT
d. Considering the last time it was applied, what percent of the total cost of lime and its application was paid by the landlord(s)?	0245
15. Was non-commercial manure (from own farm, from a neighbor's farm, etc.) or other organic material (excluding compost) applied to this field for the 2020 corn crop? (Exclude commercial	V CODE
prepared manure.)	0246
YES - [Enter code 1 and continue] NO - [Go to item 17]	
	ACRES
a. How many acres in this field was manure applied to?	0247
	•
CODE UNITS PER ACR	E OR TOTAL
b. What was the amount of manure 2 Gallons 0248 0249 0249 0249	0250
applied to this field?	
	MILES
c. What is the distance between the manure storage/production location and this field?	0251
d What was the capacity of the manure spreader 2 Gallons CODE	TOTAL UNITS
d. What was the capacity of the manure spreader (or other vehicle) used to haul manure to this field? 3 Bushel	<b>D</b> 0253
	•
e. Of the total manure applied to this field for the 2020 crop, what was the percent of manure applied	PERCENT
(i) in the fall before planting?	0254
(ii) in the spring before planting?	0255
(iii) after planting?	0256
	100%
1 Lagoon liquid?	CODE
2 Slurry liquid?	0257
f. Was the manure 3 Semi-dry or dr	
1 Broadcast or sprayed <i>without</i> incorporation?	
2 Broadcast or sprayed <i>with</i> incorporation? 3 Injected/knifed in?	<b>CODE</b>
g. Was the manure 4 Sprayed using irrigation systems?	0200



					CODE		
16. Were the manure APPLICATION RATE State, or local restrictions?					· YES	5 = 1	0264
[If item 16 is YES, ask]							
a. What basis was used to determine these manure application rate restrictions							CODE
(i) Nitrogen requirement of the even							0265
(i) Nitrogen requirement of the crop	)?				. YES	5 = 1	0266
(ii) Phosphorus requirement of the	crop?				. YES	5 = 1	0200
17 Mas compast applied to this field for the	0000 comp crop2						CODE
17. Was compost applied to this field for the 2		m 18]					0267
					••		ACRES
							0268
a. How many acres in this field was the	e compost applied	to?					•
	1 Tons	CODE		UNITS PE	R ACRE	OR	TOTAL UNITS
b. What was the amount of compost applied to this field?	2 Cubic Yards	0269	AND	0270	•		
		_				J	[Enter up to 3 source codes]
	1 Beef cattle?						FIRST
	2 Dairy cattle? 3 Hogs?	,					0281
	4 Sheep? 5 Poultry?						SECOND
<ul> <li>Were the major sources of the compost from</li> </ul>	6 Equine?						0282
·	7 Biosolids (m 8 Food waste	unicipal sludge)?					TURD
		cify:		]			<b>THIRD</b>
	10 Other? [Spe	ecify:		]			0200
					_		
	1 Produced 2 Purchase	l on this operation? d?					
d. Was the compost	3 Obtained	at no cost off this of					<b>CODE</b>
		with compensation			η		
[If item 17d = 2, ask]			D	OOLLARS & PER AG		OR	TOTAL DOLLARS
(i) What was the total cost of the purch			02	73			0274
This field? ( <i>Include</i> operator, land any payment made for transportation		r costs and					
						L	CODE
(ii) Did you hire someone to custom app	olv the compost?				VE	ES = 1	0275
				DOLLAR		<u> </u>	TOTAL
[If YES, ask]				ENTS PER		OR	DOLLARS
<ul><li>(a) What was the total cost paid this field? (<i>Include operator</i>,</li></ul>				76			0277
not report custom application							
<i>compost</i> cost.]			•				
[If item 17d = 1, ask]							MILES
(iii) What is the distance between the	e compost storage	/production locat	ion an	d this fiel	d?		0291

18. Compared to the last time you planted corn, did you make any of the following changes to your cropping practices with the intent of reducing commercial fertilizer use?

		CODE
a.	Change the type of commercial fertilizer products applied on this field [e.g. less anhydrous ammonia and more urea]	1226
b.	Manage fertilizer use more closely, with such practices as soil testing, split applications, variable rate applications, or soil incorporation on this field?	1228
C.	Change your crop rotation [e.g. plant corn on this field rather than usual crop rotation]?. YES=1	1227
d.	Reduce the application of commercial nitrogen fertilizer?	1224
[If YES	, ask]	PERCENT
	(i) By what percent did you reduce the amount of commercial nitrogen fertilizer applied for 2020?	1225

# NOTES

**BIOCONTROL or PESTICIDE APPLICATIONS---**SELECTED FIELD

Now I have some questions about all the biocontrols or pesticides used on this field for the 2020 corn crop, including both custom applications and applications made by this operation.

								С	ODE	EDIT TABLE
1. Were any or pesticio	herb des ι	icides, insect used on this c	icides orn fi	, fungio eld for t	cides or otl he 2020 cr	ner biocontrols op?	YES = 1	0302		0300
[Probe for appl	icatio	ons in the fall o	f 2015	5 (and th	ose made o	earlier if this field	was fallow).]			
If no bioco	ntro	ls or pesticide	s app	lied, go	to Section	ו E	_			
		gicides, herbicides and other pesticide		Exclud		fertilizers reported seed treatments.	7   			
Include biologica	al and	botanical pesticid	es.						<b>001</b>	99
		2		3	4	5	6	OR	7	8
CHEMICAL PRODUCT NAME	L I N E	What products were applied to this field? [Show product codes from Respondent Booklet.]	pro bou liquio fo	s this oduct ight in d or dry rm? r L or D]	Was this part of a tank mix? [If tank mix, enter line number of first product in mix.]	When was this applied? 1 BEFORE planting 3 AT planting 4 AFTER Planting	How much was applied per acre per application	d th a apj ? apj	hat was ne total mount plied per plication nis field?	[Enter unit code.] 1 Pounds 12 Gallons 13 Quarts 14 Pints 15 Liquid Ounces 28 Dry Ounces 30 Grams
	01	61			63	64	65	73		74
	01	61			63	64	65	73	·	74
	03	61			63	64	65	73	·	74
	04	61			63	64	65	73	·	74
	05	61			63	64	65	73	·	74
	06	61			63	64	65 	73	·	74
	07	61			63	64	65	73	·	74
	08	61			63	64	65	73	·	74
	09	61			63	64	65 	73	·	74
	10	61			63	64	65	73	·	74
	11	61			63	64	65	73	·	74
	12	61			63	64	65	73	·	74
	13	61			63	64	65	73	·	74
	14	61			63	64	65	73	•	74
2. [For biocont	rols c	or pesticides not	listed i	n Respo	ndent Bookle	et, specify]				

LINE

D

Pesticide Type (Herbicide, Insecticide Fungicide, etc.)

EPA No. or Trade name and Formulation

Form Purchased (Liquid or Dry)

Where Purchased [Ask ONLY if EPA No. cannot be reported.]

APPLICATIONS CODES for column 9	

- 1 Broadcast, ground without incorporation
- 6 Chisel/injected or knifed in7 Banded in or over row

9 Spot treatments

8 Foliar or directed spray

- 2 Broadcast, ground with incorporation
- 3 Broadcast, by aircraft
- 4 In seed furrow
- 5 In irrigation water

[ENUMERATOR NOTE:
Use these columns only if
TOTAL COST
(item 4 on next page) cannot be provided.]

ţ

-1

	9	10	11	12	
L I N E	How was this product applied? [Enter code from above.]	How many acres in this field were treated with this product? ACRES	How many times was it applied? NUMBER	Were these applications made by 1 Operator, partner or family member? 2 Custom applicator? 3 Employee/Other?	
01	76	77	79	80	81
02	76		79	80	81
03	76		79	80	81
04	76	77	79	80	81
05	76	77	79	80	81
06	76	77	79	80	81
07	76		79	80	81
08	76		79	80	81
09	76		79	80	81
10	76	77	79	80	81
11	76	77	79	80	81
12	76		79	80	81
13	76	77	79	80	81
14	76		79	80	81

OPTIONAL ITEM 4						
What was the cost per unit of the product?						
	UNIT CODE					
DOLLARS & CENTS PER UNIT	1 Pounds 15 Liquid Ounces 12 Gallons 28 Dry Ounces 13 Quarts 30 Grams 14 Pints					
	82					
	82					
81	82					
	82					
81	82					
	82					
	82					
	82					
	82					
	82					
	82					
	82					
	82					
	82					

3.	Were any chemicals	, biocontrols, o	r pesticides applied	l by custom	applicators?
----	--------------------	------------------	----------------------	-------------	--------------

YES – [Continue]	<b>NO</b> – [Go to item 4]
------------------	----------------------------

YES – [Continue]

a. Are you able to report the cost of chemical, biocontrol, and pesticide products and custom application separately?

**NO** – [Go to item 4]

OFFICE USE

0324

	b.	Excluding the cost of the chemical, biocontrol, and pesticide products,	DOLLARS & CENTS PER ACRE	OR	TOTAL DOLLARS
		how much was spent for custom application of such materials on this field? ( <i>Include</i> operator, <i>landlord</i> , <i>and contractor</i> costs.)			0332
4.		at was the TOTAL COST of all chemical, biocontrol, or pesticide oducts applied to this field? ( <i>Include operator, landlord, and contractor</i>	DOLLARS & CENTS PER ACRE	OR	TOTAL DOLLARS
	cos age	ents, growth regulators, and materials applied before planting and during 15 fallow period. <b>Exclude</b> seed treatments.)	0334		0335
			DOLLARS & CENTS PER ACRE	OR	TOTAL DOLLARS
	a.	How much was spent for <b>herbicide</b> products applied to this field? ( <i>Include</i> operator, <i>landlord</i> , <i>and contractor</i> costs.)	3034		3035
			DOLLARS & CENTS PER ACRE	OR	TOTAL DOLLARS
	b.	How much was spent for <b>insecticide</b> products applied to this field? ( <i>Include</i> operator, <i>landlord</i> , <i>and contractor costs</i> .)	3036		3037

**NOTE 1**: If respondent cannot report TOTAL COST, itemize cost for each product in optional columns in Biocontrol or Pesticide Table.

**NOTE 2**: If custom applied and the costs for materials can be separated from application costs, include the cost for materials only.

Otherwise, report both the material and application costs in item 4.

PEST	MANAGEMENT	PRACTICES	-SELECTED FIELD
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Ε

use	w I have some questions about your pest ma ed on this field for the 2020 corn crop. By pe SEASES.		
[EN	IUMERATOR ACTION: Were PESTICIDE app	lications reported in Section D?]	
	□ YES – [Continue]	□ <b>NO</b> – [Go to item 6]	CODE
1.	Was weather data used to assist in determi pesticide applications?	ning either the need or when to make	0800
2.	Were any biological pesticides such as Bt ( <i>l</i> regulators, neem or other natural/biological manage pests in this field?	based products sprayed or applied to	0801
3.	Were pesticides with different mechanisms primary purpose of keeping pests from beco	of action rotated or tank mixed for the oming resistant to pesticides?	0802
[EN	IUMERATOR ACTION: Were HERBICIDE (pe applications repor	sticide product codes 40000-49999) ted in Section D, item 1, column 2?]	
	□ YES – [Continue]	<b>NO</b> – [Go to item 6]	
4.	Were herbicides applied to this corn field B	EFORE weeds emerged? YES = 1	0803
5.	Were herbicides applied to this corn field A	FTER weeds emerged? YES = 1	0805
6.	In 2020, how was this field primarily scouted for insects, weeds, diseases, and/or beneficial organisms?	<ol> <li>By deliberately going to the field specifically for scouting activities [<i>Enter code 1 and go to item 7.</i>]</li> <li>By conducting general observations while performing routine tasks [<i>Enter code 2 and go to item 9.</i>]</li> <li>This field was not scouted. [<i>Enter code 3 and go to item 15.</i>]</li> </ol>	<b>CODE</b>
7.	Was an established scouting process (systernor were insect traps used in this field?		0809
8.	Was scouting for pests done in this field d	ue to	CODE
	a. a pest advisory warning?		0810
	b. a pest development model?		0811
9.	Were records kept for this field to track the diseases?		<b>CODE</b>
10.	Did you use published information on infes to take measures to manage pests in this fi	atation thresholds to determine when eld?	0824

Ε

11. <b>D</b> c	you believe that rootworms damaged co	rn grown on	this field?	YES = 1	1923	
[If Item 11 is YES, Continue. Else go to Item 12.]						
a.	If you believe that rootworm damage lead to were lodged?	o lodging, app	roximately how many	stalks	1924	
b.	If you believe that rootworm damage stunter growth, approximately how many stalks wer 		<ol> <li>One node eaten back of the stalk</li> <li>Two complete nodes of Three or more nodes</li> </ol>	eaten	<b>CODE</b> 1925	
	1		2	;	3	
12. <b>W</b>			[ <i>If YES, ask</i> ] What was the infestation level for [ <i>column 1</i> ]?— 1 Worse than normal 2 Normal 3 Less than normal CODE	[If column 1 = YES, ask] Who did the majority of the scouting for [column 1]? 1 Operator, partner or family membe 2 An employee 3 Farm supply or chemical dealer 4 Independent crop consultant or commercial scout		
12		<b>YES = 1</b> 0812	0813	0814	CODE	
a.	Weeds?					
b.	Insects or mites?	0815	0816	0817		
		1731	1732	1733		
	(i) Corn borer					
		1734	1735	1736		
	(ii) Corn rootworm					
		1708	1738	1712		
C.	Other insects					
	Disessed	0818	0819	0820		
d.	Diseases?					

[If scouted by crop consultant or commercial scout, ask item 13; else go to item 14.]

	DOLLARS & CENTS PER ACRE	OR	TOTAL DOLLARS
13. How much was charged for the scouting services for this field? [ <i>Include</i> operator, landlord and contractor cost.]	0821		0822
			OFFICE USE
a. [If scouting performed at no cost, explain:			0333
		г	
14. Did you use field mapping of previous weed problems to assist you in making w			0825
management decisions?	· · · · YE	S = 1	

		33		
15.	pur	l you do any of the following other type(s) of pest management practices for the specific rpose of managing or reducing the spread of pests in this field? <i>ter code "1" for all that apply.</i> ]		CODE
	a.	Use the services of a diagnostic laboratory for pest identification or soil plant tissue pest analysis for this field?	<b>YES</b> = 1	0841
	b.	Plow down crop residue (using conventional tillage)?	<b>YES</b> = 1	0842
	c.	Remove/burn down crop residue?	<b>YES</b> = 1	0843
	d.	Rotate crops in this field during the past three years?	<b>YES</b> = 1	0844
	e.	Maintain ground covers, mulches, or other physical barriers?	<b>YES</b> = 1	0845
	f.	Choose crop variety because of specific resistance to a certain pest?	<b>YES</b> = 1	0846
	g.	Use no-till or minimum till?	<b>YES</b> = 1	0847
	h.	Plan planting locations to avoid cross infestation of pests?	<b>YES</b> = 1	0848
	i.	Adjust planting or harvesting dates?	<b>YES</b> = 1	0849
	j.	Chop, spray, mow, plow, or burn field edges, lanes, ditches, roadways, or fence lines?	<b>YES</b> = 1	0850
	k.	Clean equipment and field implements after completing field work to reduce the spread of pests?	YES = 1	0851
	l.	Adjust row spacing, plant density or row directions?	YES = 1	0852
	m.	Have the seed treated for insect or disease control after you purchased the seed for this field?	YES = 1	0854
	n.	Maintain a beneficial insect or vertebrate habitat?	<b>YES = 1</b>	0855
	0.	Use a flamer to kill weeds?	<b>YES</b> = 1	0857
	p.	Maintain buffer strips or border rows to isolate corn from non-organic crops or land, or did you take a buffer harvest?	<b>YES</b> = 1	0856
	q.	Plant earlier or later to avoid weeds?	<b>YES</b> = 1	0865
16.		re any beneficial organisms (insects, nematodes, fungi) applied released in this field to manage pests?	<b>YES = 1</b>	0853
17.		re floral lures, attractants, repellants, pheromone traps or other biological pest controls used this field?	<b>YES = 1</b>	0858
	011	und neur	11.3 - 1	

### [If item 16 or item 17 is YES, ask--]

- i	a. What were the TOTAL materials and application costs for all biological pest controls for this field? Include operator, landlord, and contractor costs. Include cost for beneficial organisms (insects, nematodes, and fungi). Exclude biological pesticides previously reported	DOLLARS & CENTS PER ACRE 0859	OR	TOTAL DOLLARS
18.	Was a trap crop (excluding fallow) grown to help manage insects in this fi	eld? YE	ES = 1	<b>CODE</b>
				CODE
19.	Was this field left in fallow in 2015 to help manage insects on this field?	YE	ES = 1	0864

20.	Were water management practices such as irrigation scheduling, controlled			[
	drainage, or treatment of retention water used on this field to manage pests or toxin-producing fungi and bacteria?		<b>YES = 1</b>	0861
		•	1123 - 1	
21.	Was protection of beneficial organisms a factor in your pest control decisions			1765
	for this field?	-	<b>YES</b> = 1	
	[If Item 21 is YES, continue. Else go to Item 22.]			
	a. Did you change timing of, reduce application rate of, or eliminate a			1766
	nesticide application?	-	<b>YES</b> = 1	
	b. Did you change to an alternative pesticide, biocontrol, or non-pesticide practice?		<b>YES</b> = 1	1767
				2453
22.	Did you cultivate this field for weed control?	•	<b>YES</b> = 1	
	[ <i>If YES, ask</i> ]			NUMBER
	a. How many times?			2454
				1765
24.	Did you use a soil-insecticide or insecticidal seed treatment in the refuge in 2020?	•	<b>YES</b> = 1	
				UNIT CODES
				1 POUNDS
				2 CWT 3 TONS
25	If untracted (aither with insectioids or Dt seed) how much wield loss (a. a. hugh de nor	2670	PER ACRE	4 BUSHELS
23	5. <b>If untreated</b> ( <i>either with insecticide or Bt seed</i> ), how much yield loss ( <i>e.g. bushels per acre</i> ) do you think the CORN BORERS would most likely cause on this	2070		20/1
	field?		•	-
20		2672		2673
26	5. If untreated (either with insecticides or Bt seed), how much yield loss (e.g. bushels per acre) do you think the CORN ROOTWORMS would most likely cause on this	2072		2075
	field?		·	-
27	7. 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 this field?			
			·	
				CODE
28.	Did pests (weeds, insects, pathogens, animals) cause any yield loss on this field in spite	of your		0827
	pest control efforts?	-	<b>YES</b> = 1	
[ <i>If</i>	YES, ask]			
	a. How much yield loss do you CODE		ł	TOTAL LINUTS
	think was caused by all pests			TOTAL UNITS 830
	on this field in spite of the TONS		ØR	
	used to reduce those losses?			
20	I I If you used genetically engineered, glyphosate resistant seeds on this field i	n 2020 in	dicato	
29.	the number of consecutive years you have planted genetically engineered, g			NUMBER OF YEARS
	resistant seeds. [Note: A producer who used HT corn in 2020 and 2015, but con	nventional	corn in	1970
	2014, has used genetically engineered, glyphosate resistant seeds for "2" consecu	uve years	·I	
			Г	YEAR
				1971

a. What year did you first plant any glyphosate resistant seeds on this field?.....

30. Have you noticed a decline in the effectiveness of glyphosate (e.g. Roundup) in controlling weeds in this field?	0834
[If item 27= YES, continue. If item 27 = NO, go to item 30.]	YEAR
a. What was the first year you noticed a decline in effectiveness of glyphosate in controlling weeds on this field?	0835
31. After noticing the decline in the effectiveness of glyphosate in controlling weeds on this field, did you	CODE
a. stop planting glyphosate resistant crops? YES = 1	0837
b. change tillage practices?	0839
32. Have any of the following herbicides been used since 2016?	

	2020	2019	2018	2017	2016
	Yes=1	Yes=1	Yes=1	Yes=1	Yes=1
Glyphosate					
Glufosinate					
Dicamba					
2, 4-D					

						CODE
33. Have Herbicide T	olerant seeds been plante	ed on this field any time sin	ce 2016?		<b>YES</b> = 1	0834
[If item 33= YES, contir	nue. If item 33 = NO, go to	o item 36.]				
						fectiveness of the his field, did you
	Have you noticed a decline in the effectiveness of this herbicide in controlling weeds in this field? Yes=1	What was the first year you noticed a decline in the effectiveness of herbicides in controlling weeds in this field?	Stop planting herbicide resistant crops with this trait? Yes=1	pra	ge tillage actices? Zes=1	Switch to an alternative herbicide? Yes=1
Glyphosate						
Glufosinate						
Dicamba						
2, 4-D						
Sulfonylurea (STS) (soybean)						

34. Considering each year you planted a glyphosate resistant crop on this field, have you ever used the following practices in order to reduce the rate that glyphosate resistance develops in weeds on this field?

	1	2	3	4
RESI	STANCE MANAGEMENT PRACTICE		How often did you use this practice on this field?	Did the cost of managing weeds on this field increase as a result of your use of the practice?
			<ol> <li>Every Year</li> <li>Every Other Year</li> <li>Multiple Years</li> <li>One Year</li> </ol>	1 Yes 2 No 3 Don't Know
		YES = 1	CODE	CODE
a.	Control weeds early	0886	2871	0878
b.	Control weed escapes	0887	2872	0879
C.	Clean equipment between moving from one field to the next	0888	2873	0880
d.	Use herbicides other than glyphosate	0889	2874	0881
e.	Use tillage	0890	2875	0882
f.	Use the herbicide label recommended application rate	0891	2876	0883
g.	Rotate crops	0892	2877	0884

[If item 30 column 2 contains at least one "1", ask: otherwise go to item 32.]

- 35. Considering the above practices (i.e. a-g) do you believe resistance management practices are or would be more effective in reducing the rate that herbicide resistance develops in weeds on this field if operators of nearby farms also use them? .....
- 1 Yes 2 – No 3 – Don't Know 4 – The nearest farm is too far
- away to affect this field

0088

CODE

36. <b>Di</b>	d you plant genetically-engineered rootworm-resistant seed on this field in 2020? .	YES = 1	2926
			YEARS
a.	How many consecutive years have you used rootworm resistant seeds on this field?		2927
[If Item	32a is greater than 1, continue. Otherwise go to Section F.]		
b.	Have you ever switched from a rootworm resistant seed with one mode of action (MOA) to a pyramided rootworm resistant seed? <i>Note: Pyramided seeds have multiple MOAs</i> .	YES = 1	2928
[If Item	32b is YES, ask]		YEAR
C.	What year did you switch from a rootworm resistant seed with one MOA to a pyramided rootworm resistant seed?		2929

Completion Code for Pest Management Data				
1 Incomplete/Refusal	0500			

F	FIELD OPERATIONSSELECTED FIELD F									F
1.	Includi by mac	ng custom or chines on this	perations, field for t	I need to I the 2020 co	ist field work orn crop. Ple	performed	 1	СН	ECK LIST	
	<ul> <li>begin with the first field operation after harvest of previous of including operations for a cover crop established since the harvested [<i>if fallow during</i> 2019, <i>list operations starting with fall 2018</i>];</li> <li>list the operations in order through harvest and hauling of the to storage or first point of sale; and</li> <li>maintain the order of tandem hook-ups.</li> <li>CODES FOR COLUMN 5         <ol> <li>You (<i>the Operator</i>)</li> <li>Partner</li> <li>Unpaid Worker</li> <li>Paid Part-time or Seasonal Worker</li> <li>Paid Full-time Worker</li> <li>Custom Applicator</li> </ol> </li> </ul>						JSE	Land Forming Tillage Preparing for I Planting Fertilizer & Pe Harvesting & I to storage or f <b>de</b> Lime & Gypsu	sticide application	IS Dications
						[IF CUSTON	A (column 5 = c	ode 6 ), skip co	olumns 6-11]	
LINE	2 SEQUENCE	3 What operation or equipment was used?	4 [Record machine code from Respondent Booklet.]	5 Who was the machine operator- [Enter code from above.]	6 What was the size or swath of the [machine] used?	7 [Record size unit code.] 1 Feet 2 Row 3 Moldboard (bottoms) 4 Pounds 5 Bushels 6 Tons	8 C How many acres were covered? [Exclude land forming and hauling operations]	OR91011How many acres wereHow many TOTAL HOURS were spent on land forming, or 1Which Power Source was used?What w the fue type of t tractors: 1= (<40 HP) 2= (40-99 HP) 3= (100-149 HP) 5= (>=200 HP)Kores type of t type of t tractorInKores type of t tractorInHours type of t tractorInHours type of t tractorInInInHours type of t tractorIn<		
No.	No.		CODE	CODE		CODE	ACRES	HOURS	CODE	CODE
01	87		88	89	90	91	92	93	94	95
02	87		88	89	90	91	92	93	94	95
03	87		88	89	90	91	92	93	94	95
04	87		88	89	90	91	92	93	94	95
05	87		88	89	90	91	92	93	94	95
06	87		88	89	90	91	92	93	94	95
07	87		88	89	90	91	92	93	94	95
08	87		88	89	90	91	92	93	94	95
09	87		88	89	90	91	92	93	94	95
10	87		88	89	90	91	92	93	94	95
11	87		88	89	90	91	92	93	94	95
12	87		88	89	90	91	92	93	94	95
13	87		88	89	90	91	92	93	94	95
14	87		88	89	90	91	92	93	94	95
15	87		88	89	90	91	92	93	94	95
16	87		88	89	90	91	92	93	94	95
17	87		88	89	90	91	92	93	94	95
18	87		88	89	90	91	92	93	94	95

**1**/ If trucks other than pick-ups are used as the power source. use truck codes in Respondent Booklet.

**OFFICE USE** 0400

#### 2. Now I need some additional information about your labor.

Please report the paid and unpaid labor that worked on this field to produce the 2020 corn crop. (*Exclude* labor that was reported for field work performed by machines.)

	How many hour	How many hours did (type of worker) spend on this field			
	1	1 2			
	scouting for weeds, insects and diseases?	irrigating?	performing other work by hand?		
TYPE OF WORKERS	HOURS	HOURS	HOURS		
You (the operator)	1101	1102	1103		
Partner(s)	1104	1105	1106		
Unpaid workers	1107	1108	1109		
Paid part-time or seasonal workers ( <i>Exclude</i> custom and contract labor)	1110	1111	1112		
Paid full-time workers ( <b>Exclude</b> custom and contract labor)	1113	1114	1115		

	DOLLARS & CENTS PER HOUR
3. What was the average hourly wage rate paid to part-time or seasonal hired workers? ( <i>Exclude</i> custom and contract workers, payroll taxes and benefits.)	
	DOLLARS & CENTS PER HOUR
<ol> <li>What was the average hourly wage rate paid to full-time hired workers?</li> <li>(Exclude custom and contract workers, payroll taxes and benefits.).</li> </ol>	1118 
	CODE
5. Was any contract labor used on this field? YES	<b>= 1</b>
[If YES, ask	DOLLARS & CENTS PER ACRE
a. What was the average cost per acre for this contract labor? ( <i>Include</i> operator, <i>landlord</i> , <i>and contractor costs</i> .)	
	PERCENT
6. What percent of the total number of unpaid hours worked on this field was performed by workers under 16 years of age? (Estimates of labor costs for unpaid workers are based on	1120

off-farm wage rates, which are different for workers under 16 relative to those 16 and older.) .....

7. Now I need some information on how much was spent (or will be spent) for custom services used on this field for the 2020 corn crop.

	1 CUSTOM SERVICE Which of the following services were performed for the 2020 corn crop on this field?	and o how for this t	2 Including erator, landlord, contractor costs, much was spent r [column 1] on field for the 2020 corn crop?
√	$\leftarrow$ [Check box for each service performed; refer to item 1 if necessary.]	DO	LLARS & CENTS PER ACRE
	a. Custom land preparation, shaping and/or leveling?	1121	
	(Cost per hour X Total hours = Total dollars ÷ Total acres in the field = Dollars & cents per acre)		·
	b. Custom cultivating?	1122	•
	c. Custom planting and/or reseeding?	1123	•
	d. Custom harvesting?	1124	•
	e. Custom hauling from field to storage or point of first sale?	1126	
	(Dollars & cents per unit x Total units hauled from field ÷ Acres harvested in field = Dollars & cents per acre).	<u> </u>	•
	f. Custom harvesting and hauling from field to storage or point of first sale?	1127	
	(Dollars & cents per unit x Total units hauled from field ÷ Acres harvested in field = Dollars & cents per acre).		·
			CODE
8. \ YES	Was the corn harvested and hauled from this field dried (or will be dried) before it was sold or stor $S=1$	red?	
9.	Did you hire any technical or consultant services to make recommendations(such as for nutrient, pest control, irrigation, or precision farming) for this field?YES – [Continue]NO – [Go to item 10]		
	Which of the following services did you obtain?		CODE
	a Nutrient recommendations/management service?	VES - 1	1129

a.	Nutrient recommendations/management service?	YES = 1	1129
b.	Soil or tissue sample collection?	YES = 1	1130
C.	Pest control recommendations/management service?	YES = 1	1131
d.	Pest scouting?	YES = 1	1132
e.	Irrigation management service ( <i>i.e. irrigation scheduling</i> )?	YES = 1	1133
f.	Yield map or remote sensing map development/interpretation?	YES = 1	1134
g.	Other custom or technical service? [Specify:]	YES = 1	1135

10. If YES to any of these services, what was the cost for all of these services? (*Include* operator, *Iandlord*, and contractor costs. *Exclude* cost of soil/tissue tests or scouting cost reported earlier. Do not report 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	TOTAL DOLLARS
1136	1137

CODE

# 11. Were there (or will there be) any data collection tools (yield monitors, GPS mapping, etc.) used during field operations on this corn field?

2460

YES = 1

[If YES, continue; else go to Item 12]

Please report the data collection technologies you used on this field to produce this crop. Also indicate if the data is collected with Global Positioning System (GPS) coordinates and if the data will be used to create a map. (In the fifth column, report how much it would cost you to replace the data collection tool. In the sixth column, report the annual costs of using the data collection tool. Include custom service fees, data subscriptions, and online tool subscriptions. If the replacement cost or annual fee does not apply to a particular data collection tool, leave that row blank.)

	1	2	3	4	5	6
	Data Collection Tool	Tool Used	Collected with GPS	Data was/will be used to create a map	Replacement Cost	Annual Fee
		YES = 1	YES = 1	Yes = 1	Total dollars	total dollars
a.	Yield monitor.	2461	2462	2463		
b.	Soil tests on core sample (performed on-farm or sent out to a laboratory).	2464	2465	2466		
C.	Soil sensor tests.	2467	2468	2469		
d.	Hard-wired crop condition sensors	2470	2471	2472		
e.	Wireless crop condition sensors	2473	2474	2475		
f.	Drones, aircraft or satellites	2476	2477	2478		
g.	Custom service applications (data from completed work on your field)	2479	2480	2481		
h.	Public data downloaded from online sources	2482	2483	2484		

12. Please report how your farm data will be stored and accessed. [Enter code "1" for all that apply.]

a. Did you access the data collected from this field on a--

			2485
	(i) Paper hard copy?	YES = 1	
	(iii) Porsonal computer2	VEC - 1	2486
	(ii) Personal computer?	YES = 1	
			2487
	(iii) Mobile device?	YES = 1	
b.	Did you access the data collected from this field through an agricultural technology provider website?	YES = 1	2488
[If item	12b = 1 continue, otherwise go to item 13]		
С.	Did you opt-out of allowing your agricultural technology provider website to share data collected from this field with any third	YES = 1	2489
d.	Did you share any of the data collected from this field with a third party through an agricultural technology provider website?	YES = 1	2490

41

#### 13. Did you obtain crop management recommendations (data interpretation) based on that data you collected from--[Enter code "1" for all that apply.]

a.	Input dealers?	YES = 1	2491
b.	Integrated input providers?	YES = 1	2492
C.	Custom service providers?	YES = 1	2493
d.	USDA/University extension services?	YES = 1	2494

[If crop management recommendations were obtained, ask]	DOLLARS & CENTS PER ACRE	OR	TOTAL DOLLARS
e. What was the cost for all of these services? (Include operator, landlord, and contractor costs. Do not report costs for any of these services if they were previously reported as part of the costs of materials and/or application).			3151

#### 14. Did you use the yield monitor information to--- [Enter code "1" for all that apply.]

(i) monitor crop moisture con	tent to determine need for crop drying?	YES = 1	1140
(ii) add/improve tile drainage?	2	YES = 1	1141
(iii) negotiate new crop leases	?	YES = 1	1144
(iv) Help determine input use f	for management zones?	YES = 1	
(v) other uses [specify:]		YES = 1	1147

# 15. Was any of the following GPS-enabled (Global Positioning System) equipment used to produce crops on this field? [Enter code "1" for all that apply.]

a.	Light Bar?	YES = 1	2148
	"Smart" technologies like Google Glass or other heads-up cab control displays?		
C.	Other GPS-enabled equipment?	YES = 1	1158
d.	Any farming-specific apps for phones and tablets?	YES = 1	1152

CODE

[If GPS-enabled, ask]	DOLLARS & CENTS PER ACRE	OR	TOTAL DOLLARS
e. What was the cost to purchase and install all GPS-enabled equipment? (Include cost for GPS receiver and annual GPS subscription fee, and operator, landlord, and contractor costs. Do not report costs for any of this equipment if they were previously reported as part of the costs of materials and/or application.)			

				CODE
16.	Wa	s guidance auto-steering (excluding Light Bar) used on this field?	YES = 1	
	[If 1	16=1, ask]		
	a	2	New Used Leased	
	b.	Was the guidance auto-steering equipment:	····· YES = 1	
				YEAR
	b.	What year was guidance auto-steering first purchased?		
	c.	What is the replacement cost for guidance auto-steering equipment?	DOLLARS & CENTS PER ACRE OR	TOTAL DOLLARS
			DOLLARS & CENTS PER ACRE OR	TOTAL DOLLARS
	d.	What is the annual fee for guidance auto-steering?		
				CODE
17.	Wa	s a variable rate applicator used on this field?	····· YES = 1	ι

### [If YES, continue; else go to Section G]

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

1	2	3	4	5
Was a variable rate applicator used on this field for:	Was this applicator 1 Sensor- based 2 GPS-based 3 Both 4 Neither	Was this applicator 1 New 2 Used 3 Leased	What year was the applicator first used? Year	Premium paid for the applicator total dollars
a. Seeding				
b. Fertilizer/lime applications				
c. Pesticide applications				

# **IRRIGATION**

43

#### ACRES 1. How many acres in this field were irrigated for the 2020 corn crop? 1160 [If none, go to **Conclusion**].....

#### 2. Now, I have some questions about irrigation systems and water used on this field for the 2020 corn crop.

	$\downarrow$		UNIT	SYSTEM 1	SYSTEM 2
a.	What type(s) of irrigation system(s) was this field? [Show System Type Codes Enter System Type Code for up to two field acres.]	in the Respondent Booklet. systems covering the most	SYSTEM TYPE CODE	1161	1175
			INCHES PER ACRE	1162	1176
b.	What was the total quantity of water app the entire growing season? ( <i>Include</i> AL farm and off-farm sources.)	L water used from both on-	OR TOTAL ACRE-FEET	1163	1177
	[If operator cannot provide item 2b, ask (i) & (ii), else go to 2c]				
	(i) What is the <b>total</b> number of <b>hours</b> the apply water to this field during the co		TOTAL HOURS	1164	1178
	(ii) How many gallons per minute were	applied?	GALLONS PER MINUTE	1165	1179
C.	What percent of the water used to irrigat system came from surface water source		PERCENT	1166	1180
d.	What was the number of times this field corn growing season using this system? <i>irrigation.</i> ).	(Include any pre-plant	NUMBER OF	1167	1181
e.	Was the pump type [If more than one pump in the system, enter type for pump closest to water source.]	1 TURBINE? 2 SUBMERSIBLE? 3 CENTRIFUGAL? 4 BOOSTER? 5 SIPHON? 99 NO PUMP? [If code 99, go to item j.]	CODE	1168	1182
f.	What was the average pumping rate?		GALLONS PER MINUTE	1169	1183
g.			POUNDS PER SQUARE INCH	1170	1184
h.	What was the primary motor type used to pump the water?	<ol> <li>DIESEL</li> <li>GASOLINE</li> <li>LP GAS</li> <li>NATURAL GAS</li> <li>ELECTRICITY</li> <li>SOLAR POWER</li> </ol>	CODE	1171	1185
i.	What was the average motor size?		HORSEPOWER	1172	1186
j.	[ <i>If NO PUMP was used</i> (item 2e = 99), a What was the average flow rate?		GALLONS PER MINUTE	1173	1187
k.	How many other acres on this operation field's irrigation system during the 2020 this field.).	were irrigated using this growing season? ( <i>Exclude</i>	ACRES	1174	1188

		PER ACRE	OR	TOTAL DOLLARS
3.	What was the cost of the fuel or electricity used to irrigate this field?	1189		1190
	(Include operator. landlord. and contractor costs.)	·		

**DOLLARS & CENTS** 

		<ul> <li>s any water purchased to irrigate this field? (Include landlord's share and purchases m all sources.)</li> <li>YES – [Enter code 1 and continue.]</li> <li>NO – [Go to item 5.]</li> </ul>	1191	
		a. What was the total cost for the water purchased for this field DOLLARS & CENTS PER ACRE	OR TOTAL DOLLA	
		during the 2020 growing season? (Include operator, landlord, and contractor costs and ditch maintenance costs for this field.)       1193	1194	
S	IPH	ION TUBES were used (item 2a = 10 or 11), ask]	TOTAL DOLLARS	
5. What would be the total cost to replace all the siphon tubes used on this field?				
0	OL	Y PIPE system was used (item 2a = 14) ask]	TOTAL DOLLARS	
		nat was the total amount spent for poly pipe used on this field during the 20 growing season? ( <i>Include</i> operator, landlord, and contractor costs.)	1202	
G.	ATI	ED PIPE system was used (item 2a = 15 or 16), ask]	INCHES	
	Wh	nat was the average diameter of gated pipe used to irrigate this field?	1203	
			FEET	
	a.	What was the total length of gated pipe used?	1204	
		What was the total length of gated pipe used?	1204 CODE	
,	We	What was the total length of gated pipe used?         re wells used to supply irrigation water for this field?         YES – [Enter code 1 and continue]		
,	We	re wells used to supply irrigation water for this field?	CODE	
]	We	re wells used to supply irrigation water for this field?	<b>CODE</b>	
]	We	re wells used to supply irrigation water for this field? YES – [Enter code 1 and continue]	CODE 1205 NUMBER	
]	We	re wells used to supply irrigation water for this field? YES – [Enter code 1 and continue]	CODE 1205 NUMBER 1206	
, [ 	We a.	re wells used to supply irrigation water for this field? YES – [Enter code 1 and continue] NO – [Go to item 9] How many wells were used to irrigate this field?	CODE 1205 NUMBER 1206 INCHES	
, [ 	We a.	re wells used to supply irrigation water for this field?         YES – [Enter code 1 and continue]       NO – [Go to item 9]         How many wells were used to irrigate this field?         What was the average diameter of the outer well casing?	CODE 1205 NUMBER 1206 INCHES 1207	
, [ 	We a.	re wells used to supply irrigation water for this field?         YES – [Enter code 1 and continue]       NO – [Go to item 9]         How many wells were used to irrigate this field?         What was the average diameter of the outer well casing?         What was the average diameter of the outer well casing?         What was the average pumping depth of these wells during the irrigation season?         [Pumping depth is the depth to water at the start of the irrigation season, plus an average decline in the water level caused by pumping during the irrigation season.]         d.       Were other fields irrigated using water pumped from wells that supplied	CODE 1205 NUMBER 1206 I207 I207 FEET 1208 CODE	
י ו	We a.	re wells used to supply irrigation water for this field?         YES – [Enter code 1 and continue]       NO – [Go to item 9]         How many wells were used to irrigate this field?         What was the average diameter of the outer well casing?         What was the average diameter of the outer well casing?         What was the average pumping depth of these wells during the irrigation season?         [Pumping depth is the depth to water at the start of the irrigation season, plus an average decline in the water level caused by pumping during the irrigation season.]         d. Were other fields irrigated using water pumped from wells that supplied water to the selected field?	CODE 1205 NUMBER 1206 1207 1207 FEET 1208 CODE 1210	
י ו	We a.	re wells used to supply irrigation water for this field?         YES – [Enter code 1 and continue]       NO – [Go to item 9]         How many wells were used to irrigate this field?         What was the average diameter of the outer well casing?         What was the average diameter of the outer well casing?         What was the average pumping depth of these wells during the irrigation season?         [Pumping depth is the depth to water at the start of the irrigation season, plus an average decline in the water level caused by pumping during the irrigation season.]         d.       Were other fields irrigated using water pumped from wells that supplied	CODE 1205 NUMBER 1206 I207 I207 FEET 1208 CODE 1210	

	YES – [Continue]	
		INCHES
a.	What was the average diameter ( <i>in inches</i> ) of the most common type of this additional pipe used?	1212
		FEET
b.	How many feet of this additional pipe were used to bring water to this field?	1213

# CONCLUSION

LOC	LOCATION OF SELECTED FIELD						
	I need to locate the selected field of corn on this			OFFICE USE			
	map.			COUNTY FIPS CODE			
2	Million according to the enlagted correction of the inc			0010			
2.	What county is the selected corn field in?	· · [					
	Field description.						
FOF	R STATES WITH GPS UNITS ONLY	LATITUDE		GITUDE			
	Field location N	054	W 0055	·			
		dd mm ss					
3.	[ENUMERATOR ACTION: Mark map to indicate when Be sure the "X" marked on	re the selected corn field is lo n map is in the county identifie	ocated. ed above.]				
	We will need additional information to complete this or March 2017 to collect it. I'll call you then to set u						
	To receive the complete results of this survey on th			CODF			
	www.nass.usda.gov/results/. Would you rather hav	ve a brief summary	<b>YFS</b> = 1	9990			
	mailed to you at a later date?	<u></u>	······································	НН ММ			
			r	0005			
6.	ENDING TIME [MILITARY]						
REC	CORDS USE						
	[Did respondent use farm/ranch records to report]			CODE			
			I	0011			
	a. [ <b>fertilizer</b> data?]		YES = 1				
	b. [ <b>pesticide</b> data?]		YES = 1	0012			
				0013			
	c. [majority of this <b>expense</b> data?]		YES = 1				
				NUMBER			
SUF	PPLEMENTS USED		FERTILIZER	0041			
8.	Record the total number of each type of supplement		APPLICATIONS	0042			
	used to complete this interview.]		PESTICIDE				
			FIELD OPERATIONS	0043			
		9910 991					
Rep	orted by:	16					
		M M D D Tel	elephone: ( )				
Ŗ		FICE USE		O-tional Uso			
<u>к</u> . 9921	<u>. Unit</u> Ptr 1 Str Ptr 2 Str Ptr 3 Str Ptr 4 9922 9923 9927 9928	<b>4 Str OPS SSO 1</b> 923 9907	AD.J 922 990	Ontional Use 9916			
5521							
Response         Respondent         Mode         Enum.         POI           1-Comp         9901         1-Op/Mgr         9902         2-Tel         9903         9998         9989							
2-R	2-Sp 3-Face-to-	5550	9989				
3-Inac 4-Offi	ce Hold 3-Acct/Bkpr						
	9-Other		Eval.	Change			
			9900	9985			