



# AGRICULTURAL RESOURCE MANAGEMENT SURVEY SORGHUM PRODUCTION PRACTICES AND COSTS REPORT



**NATIONAL  
AGRICULTURAL  
STATISTICS  
SERVICE**

for 2011

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VERSION	ID	TRACT	SUBTRACT	T-TYPE	TABLE	LINE
3	_____	01	_____	0	000	00



### CONTACT RECORD

DATE	TIME	NOTES

**INTRODUCTION:**

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

We are collecting information on practices and costs to produce sorghum and need your help to make the information as accurate as possible. Authority for collection of information on the Sorghum Production Practices and Costs Report is Title 7, Section 2204 of the U.S. Code. This information will be used for economic analysis and to compile and publish estimates for your region and the United States. Under Title 7 of the U.S. Code and CIPSEA (Public Law 107-347), facts about your operation are kept **confidential** and used only for statistical purposes. Response is **voluntary**.

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

**H H M M**

**BEGINNING TIME**  
[MILITARY]

0004 ____
--------------

**SCREENING BOX**

0006
------

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

<b>POID</b> _____	<b>POID</b> _____
PARTNER NAME	PARTNER NAME
ADDRESS	ADDRESS
CITY STATE ZIP PHONE NUMBER	CITY STATE ZIP PHONE NUMBER
<b>POID</b> _____	<b>POID</b> _____
PARTNER NAME	PARTNER NAME
ADDRESS	ADDRESS
CITY STATE ZIP PHONE NUMBER	CITY STATE ZIP PHONE NUMBER

**A**

# SORGHUM FIELD SELECTION

**A**

TOTAL PLANTED ACRES

0050

1. How many acres of sorghum did this operation plant for the 2011 crop year? .....

[If no acres planted, review Screening Survey Information Form, make notes, then go to item 4 on back page.]

2. I will follow a simple procedure to make a random selection from the sorghum fields planted for the 2011 crop.

TOTAL NUMBER OF FIELDS PLANTED

0020

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

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

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 sorghum questions will be about this selected sorghum field.**

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

OFFICE USE  
OY Field Substituted

0022

**B** FIELD CHARACTERISTICS---SELECTED FIELD

**B**

1. How many acres of sorghum did this operation plant in this field for the 2011 crop? ..... ACRES  
1301

a. Are the acres in this field **CERTIFIED ORGANIC**? ..... YES = 1 CODE  
1300

[If YES, skip 1b and ask item 2.]

b. Was this field transitioning into organic sorghum production in 2011? ..... YES = 1 CODE  
1399

2. Were the acres in this field--- 
 1 owned by this operation?  
 2 rented for CASH with the payment being a fixed cash amount?  
 3 rented for CASH with the payment being a flexible cash amount?  
 4 rented for a SHARE of the crop?  
 5 rented for some combination of CASH and SHARE of the crop?  
 6 used RENT FREE?
  ..... CODE  
1302

3. [If field is CASH RENTED (item 2 = 2, 3, or 5), ask item 3; else go to item 4.]  
 What was the cash rent paid per acre for this 2011 sorghum field? ..... DOLLARS & CENTS  
PER ACRE  
1303

4. [If field is SHARE RENTED (item 2 = 4 or 5), ask--- ]  
 What was the landlord's share of the crop from this field? ..... PERCENT  
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 2011 crop on the selected field? (Include the costs for all inputs, such as seed, fertilizer, chemicals, technical services, custom operations, and irrigation. Exclude real estate tax expenses and lime costs paid by the landowner.) ..... DOLLARS & CENTS  
PER ACRE  
1305 OR TOTAL DOLLARS  
1306

6. What was the total cost for all inputs provided by any contractor for the 2011 crop on the selected field? (Include the costs for all inputs, such as seed, fertilizer, chemicals, technical services, custom operations, and irrigation.) ..... DOLLARS & CENTS  
PER ACRE  
1309 OR TOTAL DOLLARS  
1310

7. On what date was this field planted? ..... MM DD YY  
1308

8. Was the sorghum on this field planted with the intention of being harvested as---

- 1 Grain
- 2 Silage
- 4 Seed
- 25 Other

CODE

1327

a. [If item 8 = 1, ask---]

What was the intended purpose for the grain---

- 1 Human Food
- 2 Ethanol
- 3 Feed
- 4 Other [Specify \_\_\_\_\_]
- 5 Unknown (delivered to elevator)

1316

UNIT CODES

- 1 POUNDS
- 2 CWT
- 3 TONS
- 4 BUSHELS
- 5 BARRELS

UNITS PER ACRE

1322

1323

b. What was your yield goal at planting for this field?.....

INCHES

1312

9. What was the average sorghum row width?.....

UNIT CODE

- 1 = Pounds
- 2 = CWT
- 4 = Bushels
- 23 = 50 Pound Bags

UNITS PER ACRE

1313

1314

10. What was the seeding/planting rate per acre the first time this field was planted?.....

ACRES

1315

11. How many acres in this field had to be replanted to sorghum?  
(Acres replanted = Number of acres x Number of times replanted).....

UNIT CODE

- 1 = Pound
- 2 = CWT
- 4 = Bushel
- 22 = Acre
- 23 = 50 Pound Bag

DOLLARS & CENTS PER UNIT

1319

1320

12. What was the total cost per unit (including operator, landlord, and contractor costs) of purchased seed for this field? (Include cost of seed treatment and any seed technology fee.).....

13. Was the sorghum in the field produced under a production contract? CODE  
 (Exclude sorghum sold under a marketing contract.) . . . . . YES = 1 1329

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

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

How many acres in this sorghum field were (or will be)---			1		2
	ACRES	UNITS PER ACRE	What yield per acre did you (or do you expect to) get for sorghum---		UNIT CODE
a. harvested for grain? . . . . .	1346	. ____	1347	. ____	1348
b. harvested for grain, ratoon crop? . . . . .	1336	. ____	1337	. ____	1338
c. harvested for silage or green chop? . . . . .	1349	. ____	1350	. ____	TONS
d. harvested for silage or green chop, ratoon crop? . . . . .	1352	. ____	1353	. ____	TONS
e. harvested for commercial seed contract? . . . . .	1431	. ____	1432	. ____	1433
f. abandoned? . . . . .	1351	. ____			
g. used for some other purpose? . . . . .	1439	. ____			

16. Did any livestock graze this sorghum field after harvest of the 2011 sorghum crop? CODE  
 YES - [Enter code 1 and continue]       NO - [Go to item 18]. . . . . 1400

17. What type of livestock grazed this sorghum field after harvest of the 2011 sorghum crop? . . . . . CODE

1 Cattle  
 2 Sheep  
 3 Other [Specify: \_\_\_\_\_]

1361

a. About how many **head** of livestock (item 17) grazed this sorghum field? . . . . . HEAD  
1362

b. How many **days** did this livestock graze on this sorghum field? . . . . . DAYS  
1363

**CROP CODE LIST for item 18 – 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	
302 CRP	16 Peanuts	30 Sunflowers	318 <b>No crop planted</b> during this period
	20 Potatoes	31 Sweet Potatoes	

18. Next, I need to know what crops were previously PLANTED on the majority of this field, including cover crops.

1			2
What crops were PLANTED on this field in---			Was this field no-tilled? 1/
SEASON AND YEAR	CROP NAME	CROP CODE	YES = 1
a. FALL of 2010? .....		1343	1345
b. SPRING/SUMMER of 2010? .....		1369	1371
c. FALL of 2009? .....		1372	1374
d. SPRING/SUMMER of 2009? .....		1375	1377
e. FALL of 2008? .....		1378	1380
f. SPRING/SUMMER of 2008? .....		1381	1383
g. FALL of 2007? .....		1366	1368
h. SPRING/SUMMER of 2007? .....		1340	1342

1/ Soil and previous crop residue left undisturbed from harvest to planting.

i. [If a cover crop was planted in Spring/Summer/Fall 2010, ask--]  
 What was the seed cost per acre for the cover crop? .....

**DOLLARS & CENTS  
PER ACRE**

1468	_____
------	-------

19. In 2011, did your land-use practices for this field include any of the following---

1  <b>LAND-USE PRACTICE</b>	2  <b>Was this practice used?</b>  <b>YES = 1</b>	3  <b>What year was this practice first used?</b>  <b>YEAR</b>	4  <b>Was (or will there be) an incentive or cost-share received from:</b> 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?  <b>CODE</b>
<b>a. Structures for soil erosion control? . . . . .</b>	1421		
(i) Terraces. . . . .	1420	1441 _ _ _ _ _	1451
(ii) Grade stabilization structures. . . . .	1422	1442 _ _ _ _ _	1452
<b>b. Structures for storm water runoff control/handling? . . . . .</b>	1423		
(i) Grassed waterways. . . . .	1438	1443 _ _ _ _ _	1453
(ii) Structures for water control basins. . . . .	1424	1444 _ _ _ _ _	1454
<b>c. Filter strips or other conservation buffers? . . . . .</b>	1425		
(i) Filter strips. . . . .	1426	1445 _ _ _ _ _	1455
(ii) Field borders. . . . .	1427	1446 _ _ _ _ _	1456
(iii) Riparian buffers (i.e., grass buffers). . . . .	1428	1447 _ _ _ _ _	1457
<b>d. Other Practices? . . . . .</b>	1435		
(i) Contour farming and strip cropping. . . . .	1434	1448 _ _ _ _ _	1458
(ii) Conservation tillage / no-till. . . . .	1437	1449 _ _ _ _ _	1459
(iii) Other Practices [ <i>Specify:</i> _____] . . . . .	1436	1450 _ _ _ _ _	1460

**OFFICE USE**

1440
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**20. Has the Natural Resource Conservation Service (NRCS) classified any part of this field as "Highly Erodible"?** (Cropland identified as highly erodible is subject to highly erodible land conservation (HELCS) requirements. Producers who receive farm program payments are required to have (and apply) a written soil conservation plan.)

(A "written plan" is a plan prepared in accordance with Federal, State, or district standards.) . . . . . **YES = 1**

**CODE**

1404

**21. Have you been notified by NRCS that this field contains a wetland?** . . . . . **YES = 1**

1405

**22. During 2011, did any written plan of the following types cover this field---**

(Be sure to include soil conservation plans required under Highly Erodible Land Conservation (conservation compliance) provisions. Producers who have been notified of highly erodible land are subject to HELCS requirements and must have (and apply) a written soil conservation plan to be eligible for most farm program payments.)

(A "written plan" is a plan prepared in accordance with Federal, State, or district standards.)

<p style="text-align: center;"><b>1</b></p> <p style="text-align: center;"><b>WRITTEN PLAN TYPE</b></p>	<p style="text-align: center;"><b>2</b></p> <p style="text-align: center;"><b>Was this type of written plan used?</b></p> <p style="text-align: center;"><b>YES = 1</b></p>	<p style="text-align: center;"><b>3</b></p> <p style="text-align: center;"><b>What year was this plan implemented?</b></p> <p style="text-align: center;"><b>YEAR</b></p>	<p style="text-align: center;"><b>4</b></p> <p style="text-align: center;"><b>For any practice that is part of this plan, was (or will there be) an incentive or cost-share payment received from:</b></p> <p>1 Environmental Quality Incentives Program (EQIP)?</p> <p>2 Conservation Security or Conservation Stewardship Programs (CSP)?</p> <p>3 Conservation Reserve Program (CRP)?</p> <p>4 Any other Federal, State, Local or non-government source?</p> <p style="text-align: center;"><b>CODE</b></p>
<p>a. Conservation plan specifying practices to reduce soil erosion? . . . . .</p>	<p>1408</p>	<p>1409</p> <p style="text-align: center;">_ _ _ _ _</p>	<p>1461</p>
<p>b. Comprehensive nutrient management plan specifying practices for applying both fertilizer and manure? . . . . .</p>	<p>1410</p>	<p>1411</p> <p style="text-align: center;">_ _ _ _ _</p>	<p>1462</p>
<p>c. Nutrient management plan specifying practices for land application of manure only? . . . . .</p>	<p>1412</p>	<p>1413</p> <p style="text-align: center;">_ _ _ _ _</p>	<p>1463</p>
<p>d. Pest management plan to implement Integrated Pest Management (IPM) practices to control weeds, insects, and/or plant diseases? . . . . .</p>	<p>1414</p>	<p>1415</p> <p style="text-align: center;">_ _ _ _ _</p>	<p>1464</p>
<p>e. Irrigation water management plan specifying practices for applying or conserving irrigation water? . . . . .</p>	<p>1416</p>	<p>1417</p> <p style="text-align: center;">_ _ _ _ _</p>	<p>1465</p>

23. Was the sorghum in this field covered by Federal Crop Insurance in 2011?

YES - [Enter code 1 and continue]  NO - [Go to item 24]. . . . .

CODE  
1385

a. Which coverage did you obtain? . . .

- 1 Federal CAT (basic catastrophic insurance)
- 2 Buy-up above Federal CAT yield and/or price level
- 3 Revenue insurance
- 4 Organic plan insurance
- 5 Other Federal Crop insurance

CODE  
1386

(i) [If item a = 3, ask--]

What was the level of revenue coverage you obtained for this field? . . . . .

PERCENT  
1389

b. In what year did you (the operator listed on the label) first enroll this field in the Federal crop insurance program? . . . . .

YEAR  
1387

c. What is the 2011 Approved APH (actual production history) yield for this field? . . . . .

BUSHEL PER ACRE  
1388

d. What was the premium paid for Federal crop insurance for this field in 2011? (Exclude any sign-up fee). . . . .

DOLLARS & CENTS PER ACRE	OR	TOTAL DOLLARS
1390		1391

e. Did you (or will you) collect an indemnity payment for this field from federal crop insurance during 2011? . . . . . YES = 1

CODE  
1392

24. Was the sorghum in this field covered by private crop insurance in 2011 (hail, wind, freeze, etc.)?

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

CODE  
1393

a. What was the premium paid for private crop insurance for this field in 2011? (Exclude any sign-up fee). . . . .

DOLLARS & CENTS PER ACRE	OR	TOTAL DOLLARS
1395		1396

b. In what year did you (the operator listed on this label) first purchase private crop insurance for this field? . . . . .

YEAR  
1397

c. Did you (or will you) collect an indemnity payment for this field from private crop insurance during 2011? . . . . . YES = 1

CODE  
1394

**NOTES**

**C NUTRIENT or FERTILIZER APPLICATIONS---SELECTED FIELD**

**C**

<p>1. <b>Were commercial nutrients or fertilizers applied to this field for the 2011 sorghum crop?</b> . . . . . YES = 1</p> <p>2. <i>[If COMMERCIAL nutrient or fertilizer applied, continue; else go to item 7.]</i></p> <p>3. <b>How many commercial nutrient or fertilizer applications were made to this field for the 2011 crop?</b> <i>(Include applications made by airplanes and custom applicators.)</i> . . . . .</p>	<p><b>CODE</b></p> <p>0202</p>	<p><b>EDIT TABLE</b></p> <p>0201</p>
		<p><b>NUMBER</b></p> <p>0203</p>

**4. Now I need to record information for each application.**

**CHECKLIST**

✓ <b>INCLUDE</b>	✓ <b>EXCLUDE</b>
<input type="checkbox"/> Custom applied nutrients or fertilizers	<input type="checkbox"/> Micronutrients
<input type="checkbox"/> Nutrients or fertilizers applied in the fall of 2010 and those applied earlier if this field was fallow in 2010	<input type="checkbox"/> Unprocessed manure
<input type="checkbox"/> Commercially prepared manure or compost	<input type="checkbox"/> Nutrients or fertilizers applied to previous crops in this field
	<input type="checkbox"/> Lime and gypsum/landplaster

	<b>T-TYPE</b> 2	<b>TABLE</b> 001
<b>LINE</b> 99	<b>OFFICE USE</b> <b>LINES IN TABLE</b>	0213

APPLICATION CODES for COLUMN 6	
1 Broadcast, ground without incorporation	5 In irrigation water
2 Broadcast, ground with incorporation	6 Chisel/Injected or knifed in
3 Broadcast, by aircraft	7 Banded in or over row
4 In seed furrow	8 Foliar or directed spray

L I N E	2 <b>MATERIALS USED</b>  <i>[Enter percentage analysis or actual pounds of plant nutrients applied per acre.]</i>  <i>[Show Common Nutrients or Fertilizers in Respondent Booklet.]</i>				3 <b>What quantity was applied per acre?</b>  <i>[Leave this column blank if actual nutrients were reported.]</i>	4 <b>[Enter material code.]</b>  1 Pounds 12 Gallons 19 Pounds of actual nutrients	5 <b>When was this applied?</b>  1 In the fall before seeding 2 In the spring before seeding 3 At seeding 4 After seeding	6 <b>How was this applied?</b>  <i>[Refer to code list above.]</i>	7 <b>How many acres were treated in this application?</b>  <b>ACRES</b>
	<b>N</b> Nitrogen	<b>P<sub>2</sub>O<sub>5</sub></b> Phosphate	<b>K<sub>2</sub>O</b> Potash	<b>S</b> Sulfur					
01	0205	0206	0207	0214	0208	0209	0210	0211	0212
02	0205	0206	0207	0214	0208	0209	0210	0211	0212
03	0205	0206	0207	0214	0208	0209	0210	0211	0212
04	0205	0206	0207	0214	0208	0209	0210	0211	0212
05	0205	0206	0207	0214	0208	0209	0210	0211	0212
06	0205	0206	0207	0214	0208	0209	0210	0211	0212
07	0205	0206	0207	0214	0208	0209	0210	0211	0212
08	0205	0206	0207	0214	0208	0209	0210	0211	0212

<b>T-TYPE</b> 0	<b>TABLE</b> 000	<b>LINE</b> 00
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5. Were any nutrients or fertilizers applied by custom applicators?

YES - [Continue]  NO - [Go to item 6]

a. Are you able to report the cost of nutrient or fertilizer materials and custom application separately?

YES - [Continue]  NO - [Go to item 6]

OFFICE USE

0215

b. Excluding the cost of the nutrient or fertilizer materials, how much was spent for custom application of nutrients or fertilizers on this field? (Include operator, landlord, and contractor costs. Include costs for sulfur and micronutrients. Exclude custom application of lime, gypsum, purchased manure and purchased compost.) [If material and application costs can't be separated, exclude them here and record the total in item 6].

DOLLARS & CENTS PER ACRE

0219

OR TOTAL DOLLARS

0220

6. 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. [If custom applied and the cost of materials can be separated from application costs, include the cost of materials ONLY; otherwise, include both the material and application costs.] Include materials applied to this field if it was fallow in 2010. Exclude lime, gypsum, purchased manure and purchased compost.)

DOLLARS & CENTS PER ACRE

0221

OR TOTAL DOLLARS

0222

CODE

0218

7. Was gypsum applied to this field for the 2011 sorghum crop? YES = 1

8. Was a soil or plant tissue test performed on this sorghum field in 2010 or 2011 for the 2011 crop?

YES [Continue]  NO [Go to item 13]

CODE

9. Was a soil test for phosphorus performed on this sorghum field in 2010 or 2011 for the 2011 crop? YES = 1

a. [If phosphorus test done, ask--]

0225

POUNDS PER ACRE

0226

How many pounds of phosphorus (per acre) were recommended (by the phosphorus test)?

CODE

10. Was a soil test for nitrogen performed on this sorghum field in 2010 or 2011 for the 2011 crop? YES = 1

a. [If nitrogen test done, ask--]

0227

POUNDS PER ACRE

0228

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

CODE

11. Was a plant tissue test or leaf analysis for nutrient deficiency performed on this field for the 2011 crop? YES = 1

0229

DOLLARS & CENTS PER ACRE

0230

OR TOTAL DOLLARS

0231

12. How much was spent for these soil and plant tissue tests on this field? (Include operator, landlord, and contractor costs.)

a. If tests were done at no cost, explain---

- 1 Soil/plant tissue test provided free of charge by dealer, crop consultant, or extension service
- 2 Soil/plant tissue test costs were included in the total fertilizer costs reported in item 6
- 3 Some other reason

CODE

0232

13. [ENUMERATOR ACTION: Refer to the Fertilizer Table, column 2. If nitrogen (N) was applied, complete items 14 and 15. If NO nitrogen applied, go to item 16.]

14. Was the amount of nitrogen you decided to apply to this field based on---

		CODE
a.	Results of a soil or plant tissue test? . . . . .	0233
b.	Crop consultant recommendation? . . . . .	0234
c.	Fertilizer dealer recommendation? . . . . .	0235
d.	Extension Service recommendation? . . . . .	0236
e.	Cost of nitrogen and/or expected commodity price? . . . . .	0237
f.	Contractor recommendation? . . . . .	0238
g.	Routine practice (operator's own determination based on past experience, yield goal, etc.)? . . . . .	0239

15. Did you purchase any commercial nitrogen fertilizer applied to this field under contract or otherwise pre-purchase the fertilizer at a pre-determined price prior to planting? . . . . .

		CODE
		0223
a.	[If YES, ask--] What month prior to planting for the 2011 crop did you contract for the fertilizer used on this field? [Enter code "1" for January, "2" for February, etc.] . . . . .	0224

16. Is lime ever applied to this field? . . . . .

[If no lime applied, go to item 17; else continue.]

		CODE
		0242
a.	On average, how many years are there between applications of <b>lime</b> to this field? . . . . .	0243
b.	How many tons of <b>lime</b> were applied per acre the last time it was applied to this field? . . . . .	0244
		TONS PER ACRE
c.	Was lime applied to this field in 2010 or 2011 for the 2011 crop? . . . . .	0240
		CODE
d.	[If field is rented (Section B, item 2 = 2, 3, 4, or 5), ask--] 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
		PERCENT

17. Was non-commercial (unprocessed) manure (from own farm, from a neighbor's farm, etc.) or other organic material (excluding compost) applied to this field for the 2011 sorghum crop? (Exclude commercially prepared manure.)

YES - [Enter code 1 and continue]

NO - [Go to item 19]. . . . .

**CODE**

0246
------

a. To how many acres in this field was manure applied? . . . . .

**ACRES**

0247	. ____
------	--------

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

1 Tons
2 Gallons
3 Bushels

**CODE**

0248
------

AND

**UNITS PER ACRE OR**

0249	. ____
------	--------

**TOTAL UNITS**

0250	. ____
------	--------

c. What is the distance between the manure storage/production location and this field? . . . . .

**MILES**

0251	. ____
------	--------

d. What was the capacity of the manure spreader (or other vehicle) used to haul manure to this field? . . . . .

1 Tons
2 Gallons
3 Bushels

**CODE**

0252
------

AND

**TOTAL UNITS**

0253	. ____
------	--------

e. Of the total manure applied to this field for the 2011 crop, what was the percent of manure applied---

(i) in the fall before planting? . . . . . +

**PERCENT**

0254
------

(ii) in the spring before planting? . . . . . +

0255
------

(iii) after planting? . . . . . +

0256
------

**100%**

f. Was the manure---

1 Lagoon liquid?
2 Slurry liquid?
3 Semi-dry or dry?

**CODE**

0257
------

g. Was the manure---

1 Broadcast or sprayed <i>without</i> incorporation?
2 Broadcast or sprayed <i>with</i> incorporation?
3 Injected/knifed in?
4 Sprayed using irrigation systems?

**CODE**

0258
------

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

1 Beef cattle? 2 Dairy cattle? 3 Hogs? 4 Sheep? 5 Poultry? 6 Equine? 7 Biosolids ( <i>municipal sludge</i> )? 8 Food waste? 9 Other? [ <i>Specify: _____</i> ]	CODE 0259
--	--------------

i. Was the manure---

1 Produced on this operation? 2 Purchased? 3 Obtained at no cost off this operation? 4 Obtained with compensation? ( <i>Operator received payment for accepting the manure.</i> )	CODE 0260
--	--------------

(i) [*If item i = 2, ask---*]

What was the total cost of the purchased manure applied to this field? (*Include operator, landlord, and contractor costs. Include any payment made for transportation costs.*)

DOLLARS & CENTS PER ACRE 0284	OR	TOTAL DOLLARS 0285
----------------------------------	----	-----------------------

(ii) Did you hire someone to custom apply the manure? . . . . . YES = 1

CODE 0286
--------------

(1) [*If YES, ask---*]

What was the total cost paid to have manure custom applied to this field? (*Include operator, landlord, and contractor costs. Do not report custom application cost if it was included with the purchased manure cost.*)

DOLLARS & CENTS PER ACRE 0287	OR	TOTAL DOLLARS 0288
----------------------------------	----	-----------------------

j. Of the manure applied to this field, was any tested for nutrient content prior to application? . . . . . YES = 1

CODE 0261
--------------

k. Was the application rate of commercial nitrogen fertilizer on this field reduced due to manure application? . . . . . YES = 1

CODE 0262
--------------

(i) [*If YES, ask---*]

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

PERCENT 0263
-----------------

l. Did you adjust the sorghum harvest date for this field due to the application of manure? . . . . . YES = 1

CODE 0280
--------------

18. Were the manure APPLICATION RATES to this field influenced by Federal, State, or local restrictions? . . . . . YES = 1

CODE 0264
--------------

a. [*If item 18 is YES, ask---*]

What basis was used to determine these manure application rate restrictions--

CODE 0265
--------------

(i) Nitrogen requirement of the crop? . . . . . YES = 1

CODE 0266
--------------

(ii) Phosphorus requirement of the crop? . . . . . YES = 1

CODE 0266
--------------



19. Was compost applied to this field for the 2011 sorghum crop?

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

**CODE**

0267
------

a. To how many acres in this field was the compost applied? . . . . .

**ACRES**

0268
------

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

<div style="border: 1px solid black; padding: 2px;">                 1 Tons                  2 Cubic Yards             </div>	<b>CODE</b>	0269	<b>AND</b>	<b>UNITS PER ACRE</b>	0270	<b>OR</b>	<b>TOTAL UNITS</b>
				_____			0271

c. Were the major sources of the compost from---

1 Beef cattle? 2 Dairy cattle? 3 Hogs? 4 Sheep? 5 Poultry? 6 Equine? 7 Biosolids ( <i>municipal sludge</i> )? 8 Food waste? 9 Crop? [ <i>Specify: _____</i> ] 10 Other? [ <i>Specify: _____</i> ]	<p style="text-align: center;"><b>[Enter up to 3 source codes]</b></p> <p style="text-align: center;"><b>FIRST</b></p> <table border="1" style="width: 100%; height: 30px;"> <tr> <td style="text-align: center;">0281</td> </tr> </table> <p style="text-align: center;"><b>SECOND</b></p> <table border="1" style="width: 100%; height: 30px;"> <tr> <td style="text-align: center;">0282</td> </tr> </table> <p style="text-align: center;"><b>THIRD</b></p> <table border="1" style="width: 100%; height: 30px;"> <tr> <td style="text-align: center;">0283</td> </tr> </table>	0281	0282	0283
0281				
0282				
0283				

d. Was the compost---

1 Produced on this operation? 2 Purchased? 3 Obtained at no cost off this operation? 4 Obtained with compensation? ( <i>Operator received payment for accepting the compost.</i> )	<b>CODE</b>
	0272

(i) [If item 19d = 2, ask---]

What was the total cost of the purchased compost applied to this field? (*Include operator, landlord, and contractor costs and any payment made for transportation costs.*) . . . . .

<b>DOLLARS &amp; CENTS PER ACRE</b>	<b>OR</b>	<b>TOTAL DOLLARS</b>
0273		0274

(ii) Did you hire someone to custom apply the compost? . . . . . YES = 1

**CODE**

0275
------

(1) [If YES, ask---]

What was the total cost paid to have compost custom applied to this field? (*Include operator, landlord, and contractor costs.*) [*Do not report custom application cost if it was included with the compost cost.*] . . . . .

<b>DOLLARS &amp; CENTS PER ACRE</b>	<b>OR</b>	<b>TOTAL DOLLARS</b>
0276		0277

(iii) [If item 19d = 1, ask---]

What is the distance between the compost storage/production location and this field? . . . . .

**MILES**

0299
------

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

**D**

Now I have some questions about all the biocontrols or pesticides used on this field for the 2011 sorghum crop, including both custom applications and applications made by this operation.

1. Were any herbicides, insecticides, fungicides or other biocontrols or pesticides used on this sorghum field for the 2011 crop? . . . . . YES = 1

CODE	EDIT TABLE
0302	0301

[Probe for applications made in the fall of 2010 (and those made earlier if this field was fallow).]

**If no biocontrols or pesticides applied, go to Section E.**

Include defoliant, fungicides, herbicides, insecticides, and other pesticides.  Include biological and botanical pesticides.	Exclude nutrients or fertilizers reported earlier and seed treatments.	T - TYPE <b>3</b>	TABLE <b>001</b>
		LINE <b>99</b>	OFFICE USE LINE IN TABLE
			0319

CHEMICAL PRODUCT NAME	LINE	2	3	4	5	6	OR	7	8
		What products were applied to this field? <small>[Show product codes from Respondent Booklet.]</small>	Was this product bought in liquid or dry form? <small>[Enter L or D]</small>	Was this part of a tank mix? <small>[If tank mix, enter line number of first product in mix.]</small>	When was this applied? 1 BEFORE planting 3 AT planting 4 AFTER planting	How much was applied per acre per application?	What was the total amount applied per application in this field?	<small>[Enter unit code.]</small> 1 Pounds 12 Gallons 13 Quarts 14 Pints 15 Liquid Ounces 28 Dry Ounces 30 Grams	
	01	0305		0306	0307	0308	_____	0309	0310
	02	0305		0306	0307	0308	_____	0309	0310
	03	0305		0306	0307	0308	_____	0309	0310
	04	0305		0306	0307	0308	_____	0309	0310
	05	0305		0306	0307	0308	_____	0309	0310
	06	0305		0306	0307	0308	_____	0309	0310
	07	0305		0306	0307	0308	_____	0309	0310
	08	0305		0306	0307	0308	_____	0309	0310
	09	0305		0306	0307	0308	_____	0309	0310
	10	0305		0306	0307	0308	_____	0309	0310
	11	0305		0306	0307	0308	_____	0309	0310
	12	0305		0306	0307	0308	_____	0309	0310
	13	0305		0306	0307	0308	_____	0309	0310
	14	0305		0306	0307	0308	_____	0309	0310

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

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



3. Were any chemicals, biocontrols, or pesticides applied by custom applicators?

- YES – [Continue]
- NO – [Go to item 4]

OFFICE USE

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

0324

- YES – [Continue]
- NO – [Go to item 4]

b. Excluding the cost of the chemical, biocontrol, and pesticide products, how much was spent for custom application of such materials on this field? (Include operator, landlord, and contractor costs). . . . .

DOLLARS & CENTS PER ACRE

OR TOTAL DOLLARS

0331

0332

4. What was the TOTAL COST of all chemical, biocontrol, or pesticide products applied to this field?

(Include operator, landlord, and contractor costs, defoliant, herbicides, insecticides, fungicides, surfactants, wetting agents, growth regulators, and materials applied before planting and during 2010 fallow period. Exclude seed treatments). . . . .

DOLLARS & CENTS PER ACRE

OR TOTAL DOLLARS

0334

0335

**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.

**NOTES**



1	2	3
	[If YES, ask---] <b>What was the infestation level for [column 1] ?</b>	[If column 1 is YES, ask---] <b>Who did the majority of the scouting for [column 1] ?</b>
	1 Worse than normal 2 Normal 3 Less than normal	1 Operator, partner or family member 2 An employee 3 Farm supply or chemical dealer 4 Independent crop consultant or commercial scout
<b>YES = 1</b>	<b>CODE</b>	<b>CODE</b>
11. Was this sorghum field scouted for---		
a. weeds? . . . . .	0812	0813
b. insects or mites? . . . . .	0815	0816
c. diseases? . . . . .	0818	0819
		0814
		0817
		0820

[If scouted by crop consultant or commercial scout, ask item 12; else go to item 13.]

12. How much was charged for the scouting services for this field? DOLLARS & CENTS PER ACRE OR TOTAL DOLLARS  
 (Include operator, landlord, and contractor costs.) . . . . .

a. [If scouting performed at no cost, explain: \_\_\_\_\_ ] OFFICE USE

13. Were written or electronic records kept for this field to track the activity or numbers of weeds, insects or diseases? . . . . . YES = 1 CODE

14. Were scouting data compared to published information on infestation thresholds to determine when to take measures to manage pests in this field? . . . . . YES = 1 CODE

15. Did you use field mapping of previous weed problems to assist you in making weed management decisions? . . . . . YES = 1 CODE

16. Did you do any of the following other types of pest management for the specific purpose of managing or reducing the spread of pests in this field? [Enter code "1" for all that apply.]

		CODE
a.	Use the services of a diagnostic laboratory for pest identification or soil plant tissue pest analysis for this field? . . . . . YES = 1	0841
b.	Plow down crop residue ( <i>using conventional tillage</i> )?. . . . . YES = 1	0842
c.	Remove / burn down crop residue?. . . . . YES = 1	0843
d.	Rotate crops in this field during the past three years?. . . . . YES = 1	0844
e.	Maintain ground covers, mulches, or other physical barriers?. . . . . YES = 1	0845
f.	Choose crop variety because of specific resistance to a certain pest?. . . . . YES = 1	0846
g.	Use no-till or minimum till?. . . . . YES = 1	0847
h.	Plan planting locations to avoid cross infestation of pests?. . . . . YES = 1	0848
i.	Adjust planting or harvesting dates?. . . . . YES = 1	0849
j.	Chop, spray, mow, plow, or burn field edges, lanes, ditches, roadways, or fence lines?. . . . . YES = 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?. . . . . YES = 1	0855
o.	Maintain buffer strips or border rows to isolate sorghum from non-organic crops or land, or did you take a buffer harvest?. . . . . YES = 1	0856
p.	Use a flamer to kill weeds?. . . . . YES = 1	0857
q.	Plant earlier or later to avoid weeds?. . . . . YES = 1	0865

17. Were any beneficial organisms (*insects, nematodes, fungi*) applied or released in this field to manage pests? . . . . . YES = 1

CODE  
0853

18. Were floral lures, attractants, repellants, pheromone traps or other biological pest controls used on this field? . . . . . YES = 1

CODE  
0858

a. [If item 17 or item 18 is YES, ask--]

**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.*) . . . . .

DOLLARS & CENTS PER ACRE	OR	TOTAL DOLLARS
0859		0860



	<b>CODE</b>
19. Was a trap crop (excluding fallow) grown to help manage insects in this field? . . . . . YES = 1	0863
20. Was this field left fallow in 2010 to help manage insects on this field? . . . . . YES = 1	0864
21. 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? . . . . . YES = 1	0861
22. Was protection of beneficial organisms a factor in your pest control decisions for this field?	<b>CODE</b>
<input type="checkbox"/> YES – [Enter code 1 and continue] <input type="checkbox"/> NO – [Go to item 23] . . . . .	0862
a. Did you change timing of, reduce application rate of, or eliminate a pesticide application? . . . . . YES = 1	0866
b. Did you change to an alternative pesticide, biocontrol, or non-pesticide practice? . . . . . YES = 1	0867
23. Did you cultivate this field for weed control? . . . . . YES = 1	0868
a. [If yes, ask--] How many times? . . . . .	<b>NUMBER</b>
	0869

**PEST MANAGEMENT INFORMATION**

24. [Show Pest Management Information Sources Code List from Respondent Booklet.]  
**Which outside sources of information on pest management practices and products were used for the 2011 sorghum crop?**  
 [Starting with the most influential in determining the pest management practices used on this operation, enter codes for up to three sources.]

**PEST MANAGEMENT INFORMATION SOURCES CODE LIST**

- |  |
|--|
| 1 County, Cooperative, or University Extension Advisor, Publications or Demonstrations<br>2 Farm Supply or Chemical Dealer<br>3 Commercial Scouting Service<br>4 Independent Crop Consultant or Pest Control Advisor/Custom Applicator<br>5 Other Growers or Producers<br>6 Producer Associations, Newsletters or Trade Magazines<br>7 Electronic Information Services (DTN, Internet, World Wide Web, etc.)<br>8 Employee Pest Advisor<br>9 Other – [Specify: _____ ]<br>10 None – Operator used no <b>outside</b> information source |
|--|

[Enter up to 3 source codes.]

**FIRST**

0826
------

**SECOND**

0827
------

**THIRD**

0828
------

Completion Code for Pest Management Data	
1 Incomplete/Refusal	0340

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

**F**

1. Now I need to list all tractors used to produce sorghum on the selected field.

CHECK LIST	
Include	Exclude
<input type="checkbox"/> Tractors owned, rented, leased or borrowed	<input type="checkbox"/> Tractors provided by custom operators

1	2 What tractors were used on this field? <i>(Examples: John Deere &amp; Company, AGCO (Challenger, Massey-Ferguson, Caterpillar), Ford New-Holland (Case), Kubota)</i>	3 What is the model year? <i>(Example: 2004)</i>  YEAR	4 Is this vehicle a---? 2 2-wheel drive tractor 3 2-wheel drive tractor with front wheel assist 4 4-wheel drive tractor 5 crawler or other tracked-tractor 6 other tractor  CODE	5 What is its PTO Horsepower?  PTO HORSEPOWER	6 Is it---? 1 diesel 2 gasoline 3 LP gas 9 other  CODE
1		0120 _____	0121	0122	0123
2		0124 _____	0125	0126	0127
3		0128 _____	0129	0130	0131
4		0132 _____	0133	0134	0135
5		0136 _____	0137	0138	0139
6		0140 _____	0141	0142	0143
7		0144 _____	0145	0146	0147
8		0148 _____	0149	0150	0151
9		0152 _____	0153	0154	0155
10		0156 _____	0157	0158	0159

2. Was a self-propelled combine used to harvest the sorghum field?

- YES – [Continue]                       NO – [Go to item 3]

a. What is the model year of the self-propelled harvester(s) used to harvest sorghum from this field? *(Report the average year if more than one was used.)* . . . . .

YEAR
0830 _____

3. Including custom operations, I need to list field work performed by machines on this field for the 2011 sorghum crop. Please...

- ▶ begin with the first field operation after harvest of previous crop, including operations for a cover crop established since the previous crop harvested [if fallow during 2010, list operations starting with fall 2009];
- ▶ list the operations in order through harvest and hauling of this crop to storage or first point of sale; and
- ▶ maintain the order of tandem hook-ups.

CODES FOR COLUMN 5	
1	You (the Operator)
2	Partner
3	Unpaid Worker
4	Paid Part-time or Seasonal Worker
5	Paid Full-time Worker
6	Custom Applicator

CHECK LIST	
<b>Include</b> all field work using machines for---	
<input type="checkbox"/>	Land Forming/Levee Building
<input type="checkbox"/>	Tillage
<input type="checkbox"/>	Preparing for Irrigation
<input type="checkbox"/>	Planting
<input type="checkbox"/>	Fertilizer & Pesticide applications
<input type="checkbox"/>	Harvesting & Hauling to storage or first point of sale
<b>Exclude</b>	
<input type="checkbox"/>	Lime & Gypsum/landplaster applications

2	3	4	5	[ IF CUSTOM (column 5 = code 6) , skip columns 6-10 ]					
				6	7	8	9	10	
No.	What operation or equipment was used?	[Record machine code from Respondent Booklet.] CODE	Who was the machine operator? [Enter code from above.] CODE	What was the size or swath of the [machine] used?	[Record size unit code.] 1 Feet 2 Row 3 Moldboard (bottoms) <b>Hauling</b> 4 Pounds 5 Bushels 6 Tons CODE	What was the power source? [Record tractor line number from item 1.] <b>OR</b> 66 Animal Drawn 77 Pick up 99 Self-Propelled 1/ CODE	How many acres were covered? [Exclude land forming and hauling operations] ACRES	How many TOTAL HOURS were spent on land forming and hauling? [Example: backhoes, disk border maker, ditcher, rear mounted blade, trucks, wagons forklifts, etc.] HOURS	
0351		0352	0353	0354	0355	0356	0357	_____	0359
0361		0362	0363	0364	0365	0366	0367	_____	0369
0371		0372	0373	0374	0375	0376	0377	_____	0379
0381		0382	0383	0384	0385	0386	0387	_____	0389
0391		0392	0393	0394	0395	0396	0397	_____	0399
0401		0402	0403	0404	0405	0406	0407	_____	0409
0411		0412	0413	0414	0415	0416	0417	_____	0419
0421		0422	0423	0424	0425	0426	0427	_____	0429
0431		0432	0433	0434	0435	0436	0437	_____	0439
0441		0442	0443	0444	0445	0446	0447	_____	0449
0451		0452	0453	0454	0455	0456	0457	_____	0459
0461		0462	0463	0464	0465	0466	0467	_____	0469
0471		0472	0473	0474	0475	0476	0477	_____	0479
0481		0482	0483	0484	0485	0486	0487	_____	0489
0491		0492	0493	0494	0495	0496	0497	_____	0499
0501		0502	0503	0504	0505	0506	0507	_____	0509
0511		0512	0513	0514	0515	0516	0517	_____	0519
0521		0522	0523	0524	0525	0526	0527	_____	0529

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

OFFICE USE

0032

4. **Now I need some additional information about your labor.**

Please report the paid and unpaid labor that worked on this field to produce the 2011 sorghum crop.

(**Exclude** labor that was reported for field work performed by machines.)

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

5. **What was the average hourly wage rate paid to part-time or seasonal hired workers?**  
 (**Exclude** custom and contract workers, payroll taxes and benefits.) . . . . .

**DOLLARS & CENTS PER HOUR**

1119  
. \_\_ \_\_

6. **What was the average hourly wage rate paid to full-time hired workers?**  
 (**Exclude** custom and contract workers, payroll taxes and benefits.) . . . . .

**DOLLARS & CENTS PER HOUR**

1118  
. \_\_ \_\_

7. **Was any contract labor used on this field?** . . . . . YES = 1

**CODE**

1116

a. [If YES, ask ---]  
 What was the average cost per acre for this contract labor?  
 (**Include** operator, landlord, and contractor costs.) . . . . .

**DOLLARS & CENTS PER ACRE**

1117  
. \_\_ \_\_

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

**PERCENT**

1120

9. Now I need some information on how much was spent (or will be spent) for custom services used on this field for the 2011 sorghum crop.

1 CUSTOM SERVICE  Which of the following services were performed for the 2011 sorghum crop on this field?  ← [Check box for each service performed; refer to item 3 if necessary.]	2 Including operator, landlord, and contractor costs, how much was spent for [column 1] on this field for the 2011 sorghum crop?  DOLLARS & CENTS PER ACRE
<input checked="" type="checkbox"/> a. Custom land preparation, shaping and/or leveling $\frac{\text{---}.\text{---}}{\text{---}} \times \text{---} = \text{---} \div \text{---} = \text{---}.\text{---}$ (Cost per hour X Total hours = Total dollars ÷ Total acres in the field = Dollars & cents per acre) . . .	1121 _____
<input type="checkbox"/> b. Custom cultivating . . . . .	1122 _____
<input type="checkbox"/> c. Custom planting and/or reseeding . . . . .	1123 _____
<input type="checkbox"/> d. Custom harvesting . . . . .	1124 _____
<input type="checkbox"/> e. Custom hauling to storage or point of first sale $\frac{\text{---}.\text{---}}{\text{---}} \times \text{---} \div \text{---} = \text{---}.\text{---}$ (Dollars & cents per unit x Total units hauled from field ÷ Acres harvested in field = Dollars & cents per acre) . .	1126 _____
<input type="checkbox"/> f. Custom harvesting and hauling from field to storage or point of first sale $\frac{\text{---}.\text{---}}{\text{---}} \times \text{---} \div \text{---} = \text{---}.\text{---}$ (Dollars & cents per unit x Total units hauled from field ÷ Acres harvested in field = Dollars & cents per acre) . .	1127 _____

10. 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 12]

Which of the following services did you obtain?

	CODE
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.e. irrigation scheduling)? . . . . . 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

11. If YES to any of these services, what was the cost for all of these services? (Include operator, landlord, 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	OR	TOTAL DOLLARS
1136 _____		1137 _____

		CODE
12. Was there (or will there be) a yield monitor on the equipment used to harvest this sorghum field? .....	YES = 1	1138
[If YES, continue; else go to item 13]		
a. Was there (or will there be) a yield map produced from this harvest using information from the yield monitor? .....	YES = 1	1139
b. Did you use the yield monitor information to---		
(i) monitor crop moisture content to determine need for crop drying? .....	YES = 1	1140
(ii) add/improve tile drainage? .....	YES = 1	1141
(iii) add/improve irrigation equipment / irrigation water application? .....	YES = 1	1142
(iv) conduct in-field experiments (e.g., compare fertilizer applications, seed varieties, herbicides, pesticides, etc.)? .....	YES = 1	1143
(v) negotiate new crop leases? .....	YES = 1	1144
(vi) document yields for crop insurance, real estate tax, or farm program purposes? .....	YES = 1	1145
(vii) accurately divide crop production among partners and/or for landlord crop shares? .....	YES = 1	1146
(viii) other uses [specify: _____] .....	YES = 1	1147
13. During 2010 or 2011, was a GPS (Global Positioning System) device used to produce a map of the soil properties (such as nitrate levels, PH, soil type, etc.) of this field? .....	YES = 1	1148
a. [If YES, ask--]		
Was the information collected above based on---	<div style="border: 1px solid black; padding: 5px; width: fit-content;">                     1 soil tests from this field?                      2 a machine that measured electrical conductivity of the soil in this field (e.g. Veris machine)?                      3 other? [Specify: _____]                 </div>	1149
14. Did you have an airplane or satellite provide an image or photograph of this field either at the start or during the 2011 growing season? .....	YES = 1	1151
15. Was a variable rate applicator used on this field for---		1152
a. fertilization or lime application? .....	YES = 1	
(i) [If YES, ask--]		
Did you use a variable rate applicator for---		1153
(1) nitrogen applications? .....	YES = 1	1154
(2) phosphorus applications? .....	YES = 1	1155
(3) potash applications? .....	YES = 1	1156
(4) lime applications? .....	YES = 1	1157
(5) manure applications? .....	YES = 1	1158
b. seeding? .....	YES = 1	1159
c. pesticide applications? .....	YES = 1	
16. Was a guidance or auto-steering system (connected to GPS) used with any machine operation on this field (e.g. light bar)? .....	YES = 1	1150

**NOTES**

ACRES

1. How many acres in this field were irrigated for the 2011 sorghum crop?

[If none, go to **Section H**]. . . . .

1160
------

2. Now, I have some questions about irrigation systems and water used on this field for the 2011 sorghum crop.

		UNIT	SYSTEM 1	SYSTEM 2
a. What type(s) of irrigation system(s) was (or were) used to irrigate this field? [Show <b>System Type Codes</b> in the Respondent Booklet. Enter <b>System Type Code</b> for up to two systems covering the most field acres]. . . . .	↓	SYSTEM TYPE CODE	1161	1175
b. What was the total quantity of water applied to this field during the entire growing season? ( <b>Include ALL</b> water used from both on-farm and off-farm sources.). . . . .		INCHES PER ACRE	1162	1176
		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> this system was used to apply water to this field during the sorghum growing season?. . .		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 irrigate this field through this system came from surface water sources?. . . . .		PERCENT	1166	1180
d. What was the number of times this field was irrigated during the sorghum growing season using this system? ( <b>Include any pre-plant irrigation.</b> ) . . . . .		NUMBER OF IRRIGATIONS	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. [If item 2a = code 1-9 (PRESSURE SYSTEM), ask---] What was the system operating pressure?. . . . .		POUNDS PER SQUARE INCH	1170	1184
h. What was the primary motor type used to pump the water?	1 DIESEL 2 GASOLINE 3 LP GAS 4 NATURAL GAS 5 ELECTRICITY 6 SOLAR POWER	CODE	1171	1185
i. What was the average motor size?. . . . .		HORSEPOWER	1172	1186
j. [If <b>NO PUMP</b> was used (item 2e = 99), ask---] What was the average flow rate?. . . . .		GALLONS PER MINUTE	1173	1187
k. How many other acres on this operation were irrigated using this field's irrigation system during the 2011 growing season? ( <b>Exclude this field.</b> ) . . . . .		ACRES	1174	1188

3. What was the cost of the fuel or electricity used to irrigate this field?

(**Include operator, landlord, and contractor costs.**) . . . . .

DOLLARS & CENTS PER ACRE OR TOTAL DOLLARS

1189
------

1190
------



4. **Was any water purchased to irrigate this field?** *(Include landlord's share and purchases from all sources.)*  
 **YES** – [Enter code 1 and continue.]       **NO** – [Go to item 5]. . . . .

**CODE**  
1191

a. What percent of the water used on this field was purchased? . . . . .

**PERCENT**  
1192

b. What was the total cost for the water purchased for this field during the 2011 growing season? *(Include operator, landlord, and contractor costs and ditch maintenance costs for this field.)* . . . . .

**DOLLARS & CENTS PER ACRE**      **OR**      **TOTAL DOLLARS**

1193      1194

5. *[If SIPHON TUBES were used (item 2a = 10 or 11), ask--]*  
**What would be the total cost to replace all the siphon tubes used on this field?** . . . . .

**TOTAL DOLLARS**  
1201

6. *[If POLY PIPE system was used (item 2a = 14) ask--]*  
**What was the total amount spent for poly pipe used on this field during the 2011 growing season?** *(Include operator, landlord, and contractor costs.)* . . . . .

**TOTAL DOLLARS**  
1202

7. *[If GATED PIPE system was used (item 2a = 15 or 16), ask--]*

a. What was the average diameter of gated pipe used to irrigate this field? . . . . .

**INCHES**  
1203

b. What was the total length of gated pipe used? . . . . .

**FEET**  
1204

8. **Were wells used to supply irrigation water for this field?**  
 **YES** – [Enter code 1 and continue]       **NO** – [Go to item 9]. . . . .

**CODE**  
1205

a. How many wells were used to irrigate this field? . . . . .

**NUMBER**  
1206

b. What was the average diameter of the outer well casing? . . . . .

**INCHES**  
1207

c. 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.]* . . . . .

**FEET**  
1208

d. Did the well(s) have a water meter or other flow measurement device? . . . . . **YES = 1**

**CODE**  
1209

e. Were other fields irrigated using water pumped from wells that supplied water to the selected field?  
 **YES** – [Enter code 1 and continue]       **NO** – [Go to item 9]. . . . .

**CODE**  
1210

f. Excluding this field, how many other acres on this operation were irrigated using the same wells during the 2011 growing season? . . . . .

**ACRES**  
1211

9. **Was any additional mainline or lateral pipe used to carry water from the source to the system in this field?** (*Include underground pipe. Exclude any system pipe within the selected field.*)

- YES** – [Continue]                       **NO** – [Go to **Section H**]

a. What was the average diameter (*in inches*) of the most common type of this additional pipe used? .....

**INCHES**

1212
------

b. How many feet of this additional pipe were used to bring water to this field? .....

**FEET**

1213
------

1. In response to higher or more volatile fuel prices during the 2011 crop year for sorghum, did you---

- a. reduce the number of field operations such as tillage, cultivation, or nutrient and pesticide applications on this field (i.e., compared to what you would have otherwise applied)? . . . . . YES = 1 CODE  
1220
- b. reduce the amount of irrigation water on this field (i.e., compared to what you would have otherwise applied)? . . . . . YES = 1 1222
- c. change other production practices on this field? [If yes, specify: \_\_\_\_\_] . . . . YES = 1 1223
- d. leave the crop in the field to dry longer than you would have otherwise done on this field? . YES = 1 1221

2. In response to higher or more volatile fertilizer prices during the 2011 crop year for sorghum, did you---

- a. reduce the application rate of commercial nitrogen fertilizer on this field (i.e., compared to what you would have otherwise applied)? . . . . . YES = 1 CODE  
1224
  - (i) [If YES, ask---]
    - By what percent did you reduce the amount of commercial nitrogen fertilizer applied for 2011? . . . . . PERCENT  
1225
- b. change the type of commercial nitrogen fertilizer products applied on this field (i.e., compared to what you would have otherwise applied)? [e.g. less anhydrous ammonia and more UAN] . . . . . YES = 1 CODE  
1226
- c. increase the application rate of manure or other organic fertilizers on this field (i.e., compared to what you would have otherwise applied)? . . . . . YES = 1 1227
- d. manage fertilizer more closely, with such practices as soil testing, split applications, variable rate applications, or soil incorporation on this field (i.e., compared to what you would have otherwise done)? . . . . . YES = 1 1228

## CONCLUSION

### LOCATION OF SELECTED FIELD

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

What county is the selected sorghum field in? . . . . .

COUNTY NAME

OFFICE USE  
COUNTY FIPS CODE

0010

Field description . . . . .

### FOR STATES WITH GPS UNITS ONLY

Field location . . . . . N

LATITUDE

0054

. . . . .

d d m m s s

W

LONGITUDE

0055

. . . . .

d d d m m s s

2. [ENUMERATOR ACTION: *Mark map to indicate where the selected sorghum field is located. Be sure the "X" marked on map is in the county identified above.*]

3. We will need additional information to complete this study. We will contact you in February or March 2012 to collect it. I'll call you then to set up a time that is good for you.

4. To receive the complete results of this survey on the release date, go to [www.nass.usda.gov/results/](http://www.nass.usda.gov/results/). Would you rather have a brief summary mailed to you at a later date? . . . . . YES = 1

CODE

0099

HH MM

0005

5. ENDING TIME [MILITARY]. . . . .

### RECORDS USE

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

a. [fertilizer data?]. . . . . YES = 1

b. [pesticide data?]. . . . . YES = 1

c. [majority of this expense data?]. . . . . YES = 1

CODE

0011

0012

0013

NUMBER

0041

FERTILIZER  
APPLICATIONS

PESTICIDE  
APPLICATIONS

FIELD  
OPERATIONS

0042

0043

### SUPPLEMENTS USED

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

Reported by: \_\_\_\_\_ Telephone: (\_\_\_\_) \_\_\_\_\_

Office Use											
Response		Respondent		Mode		Enum	Eval.	R. Unit	Date	Optional	
1-Comp	9901	1- Op/Mgr	9902		0100	0098	0100	0921	9910	0002	0003
2-R		2-Sp		2-Tel							
3-Inac		3-Acct/Bkpr		3-Face-to-Face					<b>11</b>		
		4-Partner							M M D D		
		9-Other									
S/E Name											