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

We are collecting information on practices and costs to produce cotton and need your help to make the information as accurate as possible. Authority for collection of information on the Cotton 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. Response to this survey is confidential and voluntary.

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

**BEGINNING TIME**

[**MILITARY**] 0004 __ __ __

**SCREENING BOX**

0006

[**ENUMERATOR NOTE:** If Screening box is code 1, complete the Screening Supplement. If Screening box is not coded, begin with Section A.]
1. How many acres of cotton did this operation plant for the 2003 crop year?
   [•] If no acres planted, review Screening Survey Information Form.
   Make notes, then go to item 4 on back page.
   If skip-row cotton was planted exclude acreage in the skips.
   ............................

   TOTAL PLANTED ACRES
   0050  __

2. How many of the total [item 1] cotton acres were--
   a. owned by this operation? ...........................
   b. rented for CASH with the payment being a fixed cash amount?  
   c. rented for CASH with the payment being a flexible cash amount?
      (Rent paid depends on prices and/or yields, or is otherwise not a fixed amount) . .
   d. rented for a SHARE of the crop? ............................
   e. rented for some combination of CASH and SHARE of the crop?  
   f. used rent FREE? .................................
   ............................

   [Total must equal item 1.]

3. I will follow a simple procedure to make a random selection from the cotton fields planted for the 2003 crop.

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

   TOTAL NUMBER OF FIELDS PLANTED
   0020  __

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

4. 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 3 is TOTAL fields planted,
   and list only the 18 fields closest to the operator's permanent residence.
   If respondent is unable to identify or describe the fields, use the Field Selection Grid Supplement.]

   FIELD NAME, NUMBER OR DESCRIPTION
   1 .................................
   2 .................................
   3 .................................
   4 .................................
   5 .................................
   6 .................................
   7 .................................
   8 .................................
   9 .................................
   10 .................................
   11 .................................
   12 .................................
   13 .................................
   14 .................................
   15 .................................
   16 .................................
   17 .................................
   18 .................................
5. **ENUMERATOR ACTION:**
   Circle the pair of numbers on the above label associated with the last numbered field in item 4.
   Select the field according to the number you circled on the label, and record the selected number.
   If only 1 field, enter 1. .................................

   **SELECTED FIELD NUMBER**
   0021

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

   **OFFICE USE**
   OY/CEAP
   Field Substituted
   0022
### FIELD CHARACTERISTICS---SELECTED FIELD

1. How many acres of cotton did this operation plant in this field for the 2003 crop?  
   *If skip-row cotton was planted exclude acreage in the skips.*
   
   - Owner: 1
   - Cash: 2
   - Share: 3
   - Cash + Share: 4
   - Rent-free: 5

2. Were the acres in this field---
   
   - Owned: 1
   - Cash: 2
   - Cash + Flexible: 3
   - Share: 4
   - Cash + Share: 5
   - Rent-free: 6

3. *If field is CASH RENTED (item 2 = 2, 3 or 5), ask--*
   
   What was the cash rent paid per acre for this 2003 cotton crop?  
   
   DOLLARS & CENTS PER ACRE

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

5. What type of cotton was planted on this field?  

   - Upland
   - Pima - extra long staple or ELS

6. Was the cotton in this field planted with the intention of being harvested as organic cotton?  

   YES = 1

7. What year did you *(the operator listed on the label)* start operating this field?  

8. On what date was this field planted?  

9. What was the seeding rate the first time this field was planted?  

   a. Was the cotton seed--

   - Drilled: 1
   - Planted in conventional rows: 2
   - Broadcast on this field: 3

   b. *If DRILLED or PLANTED (item 10a = 1 or 2), ask--*

   What was the row width in inches?  

   INCHES

   c. Did this field have skip row cotton?  

   YES = 1  

   *If no skip row, go to item 11.*

   d. What was the common skip pattern?  

   e. What was the average width of the skip?  

10. How many acres this field had to be replanted to cotton?  

    (Number of acres times the number of times replanted.)
### FIELD CHARACTERISTICS---SELECTED FIELD

#### 12. What was the source and cost of--

(Include cost of seed treatment and technology fee. Exclude any Bt seed payment received for participating in the Pink Bollworm Program.)

<table>
<thead>
<tr>
<th>DOLLARS &amp; CENTS PER UNIT</th>
<th>UNIT CODE</th>
<th>PERCENT OF SEED PLANTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1324</td>
<td>1-POUNDS</td>
<td>1326</td>
</tr>
<tr>
<td>1325</td>
<td>2-CWT</td>
<td>1329</td>
</tr>
<tr>
<td>1326</td>
<td>22-ACRE</td>
<td>1329</td>
</tr>
<tr>
<td>1327</td>
<td>23-APPROX 50 lb. BAG</td>
<td>1330</td>
</tr>
</tbody>
</table>

a. Genetically-modified purchased seed ............................

b. Non-genetically modified purchased seed ........................

c. Homegrown seed ................................................................

(1) [If homegrown, ask–]

What was the cost for cleaning and treating this seed? ........................

#### 14. Which type of cotton seed type was primarily used--

(Show Seed Type Code List from Respondent Booklet, and choose one code.)

<table>
<thead>
<tr>
<th>CODE</th>
<th>SEED TYPE - COTTON</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Genetically-modified herbicide resistant seed variety</td>
</tr>
<tr>
<td>3</td>
<td>Genetically-modified Bt variety for insect resistance</td>
</tr>
<tr>
<td>4</td>
<td>Stacked gene variety (both genetically-modified insect and herbicide resistance)</td>
</tr>
<tr>
<td>6</td>
<td>Variety planted not described above</td>
</tr>
</tbody>
</table>

a. in this field in 2003? ........................................................

b. in this field in 2002? [Leave blank if different commodity planted in 2002.] ....................................

#### 15. What percentage of the field was used as refuge in order to comply with Bt cotton insect resistant management guidelines? ..............................................................

#### 16. [If Bt or herbicide resistant cotton seed is used, item 14a = 1, 3, or 4, ask--]

What was the technology fee paid? ..............................................................

<table>
<thead>
<tr>
<th>CODE</th>
<th>DOLLARS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1334</td>
<td>1335</td>
</tr>
</tbody>
</table>

#### 17. [If item 14a = 1, 3, or 4, ask--]

Resistant seed varieties offer several benefits.

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

<table>
<thead>
<tr>
<th>CODE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Increase yields through improved pest (weed or insect) control?</td>
</tr>
<tr>
<td>2</td>
<td>Decrease pesticide input costs?</td>
</tr>
<tr>
<td>3</td>
<td>Decrease machinery costs?</td>
</tr>
<tr>
<td>4</td>
<td>Improve ability to use or ease of using reduced tillage or no-till systems?</td>
</tr>
<tr>
<td>5</td>
<td>Improve ability, ease or rotating crops?</td>
</tr>
<tr>
<td>6</td>
<td>Save management time or labor or improve ease of management?</td>
</tr>
<tr>
<td>7</td>
<td>Adopt more environmentally friendly practices?</td>
</tr>
<tr>
<td>8</td>
<td>For some other reason(s)? [Specify ____________________________]</td>
</tr>
</tbody>
</table>
18. [If 14a = 1 or 6 ask--]
   In 2003, which of the following reasons influenced you the most in deciding not to plant Bt cotton on this field--

   1. Did not expect to have enough *Bt target pests* to justify the cost of Bt cotton.
   2. Concerned about finding a market for Bt cotton.
   3. This field was used as refuge in 2003.
   4. Concerned about the environmental impact of Bt cotton.
   5. None of the above.

   CODE
   1340

   ACRES
   [51x711]If 14a = 1 or 6 ask--

   19. How many acres of cotton in this field were planted to fill a commercial seed contract?

   CODE
   1341

   21. Has harvest of this field been completed?  

   YES = 1

   CODE
   1343

   a. What were the beginning and ending dates for the harvest of this field?  

   HARVEST BEGINNING DATE
   MM   DD   YY
   and
   HARVEST ENDING DATE
   MM   DD   YY

   1344
   1345

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

   a. How many ACRES in the cotton field were (will be) harvested for lint?  

   (1) How many pounds PER ACRE did you get (do you expect to get if not yet harvested) for lint?  

   b. How many ACRES in the cotton field were (will be) abandoned?  

   CROP CODE LIST for item 26
   PREVIOUSLY PLANTED CROP was--

   1 Alfalfa hay
   11 Hay, all other
   190 Barley
   3 Dry Beans
   85 Canola
   310 Clover
   6 Corn for grain
   5 Corn for silage
   196 Tobacco, flue cured
   193 Tobacco, burley
   281 Cotton, Upland
   282 Cotton, Pima
   302 CRP
   311 Grasses other than clover
   94 Mustard
   15 Oats
   31 Sweetpotatoes
   16 Peanuts
   17 Dry Peas
   20 Potatoes
   21 Rice
   22 Rye
   98 Safflower
   25 Sorghum for grain
   24 Sorghum for silage
   26 Soybeans
   28 Sugarbeets
   30 Sunflowers
   142 Vegetables
   163 Wheat, durum
   164 Wheat, other spring
   165 Wheat, winter
   318 *No crop planted* during this period

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

   1 What crop was PLANTED on this field in--

   CROP NAME
   CROP CODE
   YES = 1
   YES = 1
   a. FALL of 2002?  
   b. SPRING/SUMMER of 2002?  
   c. FALL of 2001?  
   d. SPRING/SUMMER of 2001?  
   e. FALL of 2000?  
   f. SPRING/SUMMER of 2000?  

   [1] Soil and previous crop residue left undisturbed from harvest to planting.
27. In 2003, did your land-use practices for this field include--

<table>
<thead>
<tr>
<th>Code</th>
<th>Year</th>
<th>In what year were the (column 1) established in this field?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>[If (column 1) were established before operator began operating this field, enter code 1.]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[YES=1]</td>
</tr>
</tbody>
</table>

- terraces? YES = 1
- temporary or permanent levees? YES = 1
- grassed waterways? YES = 1
- filter strips or riparian buffers on or adjoining the field? YES = 1
- contour farming? YES = 1
- strip cropping? YES = 1
- underground outlets such as tile drainage? YES = 1
- other drainage channels or diversions? YES = 1

28. Has the Natural Resource Conservation Service (NRCS) classified any part of this field as “Highly Erodible”? YES = 1

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

30. In 2003, did you receive technical assistance for planning, installing, maintaining, or using conservation practices or systems on this field? YES = 1

31. In 2003, did you (or will you) receive cost-sharing or incentive payments for conservation practices on this field? YES = 1

32. During 2003, did any written plan of the following types cover this field and, if so, in what year was the plan implemented? YES = 1

<table>
<thead>
<tr>
<th>Code</th>
<th>Year Implemented</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Conservation plan specifying practices to reduce soil erosion? YES = 1</td>
<td></td>
</tr>
<tr>
<td>b. Comprehensive nutrient management plan specifying practices for applying both fertilizer and manure? YES = 1</td>
<td></td>
</tr>
<tr>
<td>c. Nutrient management plan specifying practices for land application of manure only? YES = 1</td>
<td></td>
</tr>
<tr>
<td>d. Pest management plan specifying pesticide use and/or other practices for controlling weeds, insects, or plant disease? YES = 1</td>
<td></td>
</tr>
<tr>
<td>e. Irrigation water management plan specifying practices for applying or conserving irrigation water? YES = 1</td>
<td></td>
</tr>
</tbody>
</table>
33. During 2003, did you pay any technical service provider or consultant to develop or write any of these plans which included this field? ...... YES = 1

   a. [If YES, ask—]
      What was the cost for developing this plan for this field?
      (Include landlord's/contractor's share.
      Exclude cost of construction or materials.) ................
      DOLLARS & CENTS PER ACRE OR TOTAL DOLLARS
      1418 1419 1420

34. Was the cotton crop on this field covered by Crop Insurance in 2003?

   □ YES - [Enter code 1 and continue.] .......................... YES = 1

   □ NO - [Go to Section C.]
      If YES, which coverages did you obtain?
      [Enter code for all that apply.]
      a. Basic catastrophic insurance (Federal CAT) bought for a flat fee and protects against crop loss greater than 50% of average yield, at 55% of the price. YES = 1
      b. Buy-up on Basic Federal CAT for higher levels of yield and price protection (such as 65% of yield and 100% price, multi peril crop insurance). YES = 1
      c. Revenue insurance include Income Protection (IP), Crop Revenue Coverage (CRC), and Revenue Assurance (RA). YES = 1
      d. Other Federal Crop insurance (Group Risk Plan, Adjusted Gross Revenue, Group Risk Income Protection, etc.) YES = 1
      e. Other Private Crop insurance (Hail, wind, freeze, etc.) YES = 1
1. Were commercial FERTILIZERS applied to this field for the 2003 cotton crop? ........................................ YES = 1 0202 0201

2. [If COMMERCIAL fertilizer applied, continue, else go to item 5.]

3. How many commercial fertilizer applications were made to this field for the 2003 crop? (Include applications made by airplanes and commercial applicators) ........................................ 0203

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

<table>
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<th>CHECK LIST</th>
<th>EXCLUDE</th>
<th>T-TYPE</th>
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<table>
<thead>
<tr>
<th>MATERIALS USED</th>
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<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>P&lt;sub&gt;2&lt;/sub&gt;O&lt;sub&gt;5&lt;/sub&gt;</td>
<td>K&lt;sub&gt;2&lt;/sub&gt;O</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>0205</td>
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<td>0208</td>
<td>0209</td>
<td>0210</td>
<td>0211</td>
</tr>
</tbody>
</table>

5. Was sulfur applied to this field for the 2003 cotton crop? (Include direct applications and sulfur applied as a component of a fertilizer application.) .......................... YES = 1 0216

a. [If sulfur applied, ask--]

How many pounds of sulfur were applied per acre? ........................................

POUNDS PER ACRE 0217 0218

6. Was gypsum applied to this field for the 2003 cotton crop? .......................... YES = 1
7. Were any fertilizers applied by custom applicators?  
   ☐ YES - [Continue.]  ☐ NO - [Go to item 8.]
   a. Are you able to report the cost of fertilizer materials and custom application separately?  
      ☐ YES - [Continue.]  ☐ NO - [Go to item 8.]
   b. Excluding the cost of the fertilizer materials, how much was spent for custom application of fertilizers on this field?  
      *(Include landlord and contractor costs.  
       Exclude custom application of lime, gypsum & purchased manure.)  
      *(If material and application costs can't be separated, exclude them here and record the total in item 8.)*

8. What was the TOTAL COST of all fertilizer products applied to this field?  
   *(Include landlord and contractor costs.  
     If skip-row cotton, include the cost of any fertilizer applied to the skips.  
     Exclude lime, gypsum and purchased manure.  
     If custom applied, include the cost of materials ONLY, unless materials and application costs cannot be separated.  
     Include materials applied to this field if it was fallow in 2002.)*

9. What was your yield goal for this field?  

10. Was a soil test for phosphorus performed on this cotton field in 2002 or 2003 for the 2003 crop?  
    *(If phosphorus test done, ask--)*
    How many pounds of phosphorus *(per acre)* were recommended *(by the phosphorus test)*?  

11. Was a soil test for nitrogen performed on this cotton field in 2002 or 2003 for the 2003 crop?  
    *(If nitrogen test done, ask--)*
    How many pounds of nitrogen *(per acre)* were recommended *(by the nitrogen test)*?  

12. Was a plant tissue test for nutrient deficiency performed on this field in 2002 or 2003 for the 2003 cotton crop?  
    *(If test done, ask--)*
    How many pounds of nutrients were recommended *(by the tissue test)*?  

---

<table>
<thead>
<tr>
<th>T-TYPE</th>
<th>TABLE</th>
<th>LINE</th>
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<tbody>
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<table>
<thead>
<tr>
<th>DOLLAR &amp; CENTS</th>
<th>OR</th>
<th>TOTAL DOLLARS</th>
</tr>
</thead>
<tbody>
<tr>
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<table>
<thead>
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<th>OR</th>
<th>TOTAL DOLLARS</th>
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<tbody>
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<table>
<thead>
<tr>
<th>POUNDS PER ACRE</th>
<th>CODE</th>
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<table>
<thead>
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<th>POUNDS PER ACRE</th>
<th>CODE</th>
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<tbody>
<tr>
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<table>
<thead>
<tr>
<th>POUNDS PER ACRE</th>
<th>CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0229</td>
<td></td>
</tr>
</tbody>
</table>
13. [If soil or plant tissue test done, ask--; else go to item 14.]

How much was spent for these soil and plant tissue tests on this field?  [Include landlord and contractor costs.]

<table>
<thead>
<tr>
<th>DOLLARS &amp; CENTS PER ACRE</th>
<th>TOTAL DOLLARS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0230</td>
<td>0231</td>
</tr>
</tbody>
</table>

- 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 8
- 3. Some other reason

14. [Enumerator Action: Refer to the Fertilizer Table, column 2.]

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

[Enter code for all that apply.]

- a. Results of a soil or plant tissue test? .......................... YES = 1
- b. Crop consultant recommendation? ................................. YES = 1
- c. Fertilizer dealer recommendation? .............................. YES = 1
- d. Extension Service recommendation? ............................. YES = 1
- e. Cost of nitrogen and/or expected commodity price? .............. YES = 1
- f. Contractor recommendation? .................................. YES = 1
- g. Routine practice (operator’s own determination based on past experience, yield goal, etc.)? ................................... YES = 1

16. What share of the commercial nitrogen fertilizer applied to this field was purchased under contract or otherwise pre-purchased at a pre-determined price set prior to January 1, 2003? .................................................

17. Did you use any product to slow the breakdown of nitrogen on this field?  
(For example a nitrification inhibitor such as N-Serve or a urease inhibitor such as Agrotain) ....... YES = 1

18. Is lime ever applied to this field?  ........................................... YES = 1

- a. [If no lime applied, go to item 19–else continue.]

  On average, how many years are there between applications of lime to this field? ....

- b. How many tons of lime were applied per acre the last time it was applied to this field? ................................................

- c. [If rented, 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)? ...........
19. Was manure applied to this field for the 2003 cotton crop? 

Exclude commercially prepared manure.

☐ YES - Enter code 1 and continue.

☐ NO - Go to Section D.

---

a. How many acres was manure applied to?

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

1 - TONS
2 - GALLONS
3 - BUSHELS

CODE
UNITS PER ACRE
TOTAL UNITS

0248
0249
0250

0247

AND OR

0251

MILES

0252

AND

0253

MILES

0254
0255
0256

100%

f. Was the manure--

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

CODE

0257

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

CODE

0258

1 Beef cattle?
2 Dairy cattle?
3 Hogs?
4 Sheep?
5 Poultry?
6 Equine?
7 Biosolids (municipal sludge, food waste, etc.)?
8 Other (Specify _______________)?

CODE

0259

1 Produced on this operation?
2 Purchased?
3 Obtained at no cost off this operation?
4 Obtained with compensation?

CODE

0260
20. Were the manure APPLICATION RATES to this field influenced by State or local restrictions? 

- YES = 1

a. [If YES item 20, ask-]
   What basis was used to determine these manure application rate restrictions--

   (1) Nitrogen requirement of the crop? 

   - YES = 1

   (2) Phosphorus requirement of the crop? 

   - YES = 1
# PESTICIDE APPLICATIONS---SELECTED FIELD

## 1.
Including both custom applications and applications made by this operation, let's list all the chemicals used on this field for the 2003 cotton crop.

**Were any herbicides, insecticides, fungicides or other chemicals used on the cotton field for the 2003 crop?**

---

### CODE EDIT TABLE

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0302</td>
<td>YES = 1</td>
</tr>
<tr>
<td>0301</td>
<td></td>
</tr>
</tbody>
</table>

---

**Include** Boll Weevil eradication program applications.

**Include** chemicals used to kill cover/nurse crop.

**Include** defoliants, fungicides, herbicides, insecticides, growth regulators (neem, Bt, etc.)

**Include** biological/botanical pesticides, microbial agents, miticides, nematicides, rodenticides, and soil fumigants.

**Exclude** fertilizers, adjuvants, (e.g. wetting agents, stickers, spreaders, etc.), seed treatments.

## T-TYPE TABLE

<table>
<thead>
<tr>
<th>LINE</th>
<th>OFFICE USE</th>
<th>LINES IN TABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>001</td>
<td></td>
<td>99</td>
</tr>
</tbody>
</table>

## NOTES

**What products were applied to this field?**

[Show product codes from Respondent Booklet.]

**Was this product bought in liquid or dry form?**

[Enter 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
2 AT planting
3 AFTER planting
4 Defoliation prior to harvest

**How much was applied per acre per application?**

**What was the total amount applied per application in this field?**

---

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

**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.]
## APPLICATION CODES for column 9

<table>
<thead>
<tr>
<th>Application Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Broadcast, ground without incorporation</td>
</tr>
<tr>
<td>2</td>
<td>Broadcast, ground with incorporation</td>
</tr>
<tr>
<td>3</td>
<td>Broadcast, by air (Aerial application)</td>
</tr>
<tr>
<td>4</td>
<td>In seed furrow</td>
</tr>
<tr>
<td>5</td>
<td>In irrigation water</td>
</tr>
<tr>
<td>6</td>
<td>Chisel, injected or knifed in</td>
</tr>
<tr>
<td>7</td>
<td>Banded in or over row</td>
</tr>
<tr>
<td>8</td>
<td>Foliar or directed spray</td>
</tr>
<tr>
<td>9</td>
<td>Spot treatments</td>
</tr>
</tbody>
</table>

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

---

[If column 9=9, then column 6 and 10 must be blank.]

<table>
<thead>
<tr>
<th>LINE</th>
<th>9 How was this product applied? [Enter code from above.]</th>
<th>10 How many acres in this field were treated with this product?</th>
<th>11 How many times was it applied?</th>
<th>12 Were these applications made by--</th>
<th>OPTIONAL ITEM 4 What was the cost per unit of the product?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>NUMERIC</td>
<td></td>
<td>1 Operator, Partner or Family member?</td>
<td>DOLLARS and CENTS PER UNIT</td>
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<td></td>
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<td>ACRES</td>
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<td>2 Custom applicator?</td>
<td>DOLLARS and CENTS PER UNIT</td>
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<td>3 Employee / Other?</td>
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<td>DOLLARS and CENTS PER UNIT</td>
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</table>
3. Were any chemicals or pesticides applied by custom applicators?
   (Exclude applications associated with the Boll Weevil Eradication Program (BWEP) and the Pink Bollworm Program (PBWP).)
   ☐ YES - [Continue.] ☐ NO - [Go to item 4.]

   a. Are you able to report the cost of chemical product and custom application separately?
      ☐ YES - [Continue.] ☐ NO - [Go to item 4.]

   b. Excluding the cost of the chemical product, how much was spent for custom application of chemicals and pesticides on this field?
      (Include operator and landlord cost.) ..................................

4. What was the TOTAL COST of all chemical products applied to this field? ..................................
   (Include operator and landlord cost, defoliants, herbicides, insecticides, fungicides, surfactants, wetting agents, growth regulators, end materials applied before planting and during 2002 fallow period. If skip-row cotton, include the cost of any chemicals applied to the skips.
   Exclude seed treatments. Exclude the operator or landlord assessments associated with the Boll Weevil Eradication Program (BWEP) and the Pink Bollworm Program (PBWP).
   
   NOTE 1: If respondent cannot report TOTAL COST, itemize cost for each product in optional columns in Pesticide Table, item D1.
   
   NOTE 2: For custom applications, If respondent cannot report cost of chemical product separately from application costs, report both in item 4.

5. Was the cotton grown in this field in 2003 covered by the boll weevil eradication program (BWEP)? ..................................
   [If YES, ask–]

   a. What phase has the eradication program reached in this field-- ..........................

   b. For 2003, what was your assessment on this field to participate in the BWEP?
      (Include operator and landlord charges for the 2003 cotton whether paid prior to or after ginning.) ..................................

   c. How did the level of secondary cotton pests in 2003 compare with the level prior to participating in the BWEP?
      (e.g. beet armyworm; budworms; bollworms; plant bugs; or aphids)-- ..........................

   d. Did employees from the BWEP foundation scout or check insect traps on this field for secondary pest infestations? ..................................

   ASK FOR CALIFORNIA and TEXAS ONLY

6. Was the cotton in this field covered by an area-wide pink bollworm eradication or suppression program (PBWP)? ..................................
   [If YES, ask–]

   a. For the current crop year, what was your cost on this field to participate in the PBWP?
      (Include operator and landlord per acre and/or per bale charges for this year’s cotton whether paid prior to or after ginning. If you receive a credit on your PBWP assessment for planting Bt cotton to control pink bollworm report only the amount of the assessment you or your landlord paid.) ..................................
PEST MANAGEMENT PRACTICES--SELECTED FIELD

Now I have some questions about your pest management decisions and practices used on this field for the 2003 cotton crop. By pests, we mean *WEEDS, INSECTS and DISEASES.*

<table>
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<tr>
<th>T-TYPE</th>
<th>TABLE</th>
<th>LINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
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<td>00</td>
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</tbody>
</table>

1. [Enumerator Action: *Were PESTICIDE APPLICATIONS reported in Section D?*]
   - ☐ YES - [Continue.]
   - ☐ NO - [Go to item 10.]

2. Was weather data used to assist in determining either the need or when to make pesticide applications? ................................. YES = 1

3. Were any biological pesticides such as Bt (*Bacillus thuringiensis*), insect growth regulators, (*courier, Intrepid, etc.*), neem or other natural/biological based products sprayed or applied to manage pests in this field? .................... YES = 1

4. Were pesticides with different mechanisms of action rotated or tank mixed for the primary purpose of keeping pests from becoming resistant to pesticides? ............................. YES = 1

5. [Enumerator Action: *Were HERBICIDES used (pesticide product codes 4000-4999), Section D, item 1, column 2?*]
   - ☐ YES - [Continue.]
   - ☐ NO - [Go to item 8.]

6. Were herbicides applied to this cotton field BEFORE weeds emerged? ............................................ YES = 1
   - [If item 6 = YES, ask--]
     a. Were the herbicides applied BEFORE weeds emerged on this cotton field based primarily on--
        - 1 routine treatments of what *weeds* are usually present?
        - OR
        - 2 weed scouting from the previous year?

7. Were herbicides applied to this cotton field AFTER weeds emerged? ............................................. YES = 1
   - [If item 7 = YES, ask--]
     a. Were the herbicides applied AFTER weeds emerged on the cotton field based primarily on--
        - 1 routine treatments of what *weeds* are usually present?
        - OR
        - 2 weed scouting from the previous year?

8. [Enumerator Action: *Were INSECTICIDES used (pesticide product codes 1000-1999), in Section D, item 1, column 2?*](Exclude any insecticide or biological pest control treatments due to the BWEP or PBWP.)
   - ☐ YES - [Continue.]
   - ☐ NO - [Go to item 10.]

9. Were the insecticides applied to this cotton field based primarily on--
   - 1 routine treatments for what *insects* are usually present?
   - OR
   - 2 scouting for insect infestation?

10. In 2003, how was this field primarily scouted for insects, weeds, diseases and/or beneficial organisms--
    - 1 By conducting general observations while performing routine tasks? (Enter code 1 and go to item 13.)
    - 2 By deliberately going to the field specifically for scouting activities? (Exclude trap checking or scouting activities by BWEP or PBWP personnel.) (Enter code 2 and go to item 11.)
    - 3 This field was not scouted. (Enter code 3 and go to item 17.)
11. Was an established scouting process used (systematic sampling, recording counts, etc.) or were insect traps used in this field?  
   \(\text{Excluding trap checking or scouting by BWEP or PBWP personnel.}\)  
   \[\text{YES} = 1\]  
   \[\text{CODE} \ 1609\]

12. Was scouting for pests done in this field due to--
   
   a. a pest advisory warning?  
   \[\text{YES} = 1\]  
   \[\text{CODE} \ 1610\]

   b. a pest development model?  
   \[\text{YES} = 1\]  
   \[\text{CODE} \ 1611\]

13. Was this cotton field scouted for--
   
   a. weeds?  
   \[\text{YES} = 1\]  
   \[\text{CODE} \ 1612\]

   b. insects and mites?  
   \[\text{YES} = 1\]  
   \[\text{CODE} \ 1615\]

   c. diseases?  
   \[\text{YES} = 1\]  
   \[\text{CODE} \ 1618\]

14. \[\text{If scouted by crop consultant or commercial scout, ask--; else go to item 15.}\]
   How much did you pay for the scouting services for this field?  
   \[\text{Include landlord and contractor cost, but exclude costs of scouting for the BWEP or PBWP.}\]  
   \[\text{DOLLARS & CENTS PER ACRE OR TOTAL DOLLARS}\]  
   \[\text{CODE} \ 1621\]

15. Were written or electronic records kept for this field to track the activity or numbers of weeds, insects or diseases?  
   \[\text{YES} = 1\]  
   \[\text{CODE} \ 1623\]

16. Was scouting data compared to published information on infestation thresholds to determine when to take measures to manage pests in this field?  
   \[\text{YES} = 1\]  
   \[\text{CODE} \ 1624\]

17. Was field mapping data used for making weed management decisions on this field?  
   \[\text{YES} = 1\]  
   \[\text{CODE} \ 1625\]

18. Were the services of a diagnostic laboratory used for pest identification or soil or plant tissue pest analysis for this field?  
   \[\text{YES} = 1\]  
   \[\text{CODE} \ 1626\]

19. Were crop residues plowed down or removed in this field to manage pests?  
   \[\text{YES} = 1\]  
   \[\text{CODE} \ 1627\]

20. Were crops rotated in this field during the past 3 years for the purpose of managing pests?  
   \[\text{YES} = 1\]  
   \[\text{CODE} \ 1628\]

21. Were ground covers, mulches, or other physical barriers maintained for this field to manage pest problems?  
   \[\text{YES} = 1\]  
   \[\text{CODE} \ 1629\]

22. Was a seed variety chosen to plant in this field because it had resistance to a specific pest?  
   \[\text{YES} = 1\]  
   \[\text{CODE} \ 1630\]

23. Was no-till or minimum till used to manage pests in this field?  
   \[\text{YES} = 1\]  
   \[\text{CODE} \ 1631\]
24. Were planting locations planned to avoid infestation of pests? \( \text{YES} = 1 \)

25. Were planting or harvesting dates adjusted for this field to manage pests? \( \text{YES} = 1 \)

26. Was row spacing or plant density adjusted in this field to manage pests? \( \text{YES} = 1 \)

27. Was a trap crop grown to help manage insects in this field? \( \text{YES} = 1 \)

28. Were any beneficial organisms (insects, nematodes, fungi) applied or released in this field to manage pests? \( \text{YES} = 1 \)

29. Were floral lures, attractants, repellants, pheromone traps or other biological pest controls used on this field? \( \text{YES} = 1 \)
   a. [If item 28 or 29 = YES, ask–]
      What were the TOTAL materials and application costs for all biological pest controls for this field?
      \[ \text{Include landlord's and contractor's share.} \]
      \[ \text{Exclude biological pesticides.} \]
      \[ \text{Exclude biological pest control treatment costs for the BWEP or PBWP.} \]

30. Was this field cultivated for weed control during the growing season? \( \text{YES} = 1 \)
   a. [If item 30 = YES, ask–]
      How many times did you cultivate this field for weed control during the growing season? \( \text{NUMBER} \)

31. Were field edges, lanes, ditches, roadways or fence lines chopped, mowed, plowed, or burned to manage pests for this field? \( \text{YES} = 1 \)

32. Were equipment and implements cleaned after completing field work to reduce the spread of pests? \( \text{YES} = 1 \)
PEST MANAGEMENT INFORMATION

34. [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 2003 cotton crop?

(Starting with the most influential in determining the pest management practices used on this operation, choose up to 3 sources, and enter code(s).)

PEST MANAGEMENT INFORMATION SOURCES CODE LIST

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

35. Other than pesticide applicator training, have you (the operator) attended any training session on pest identification and management since October 1, 2002? YES = 1

Completion Code for Pest Management Data
1 - Incomplete/Refusal 0340
1. Now I need to list all tractors used to produce cotton on this selected field.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAKE and MODEL</td>
<td>YEAR</td>
<td>CODE</td>
<td>Is this vehicle a --</td>
<td>What is its PTO horsepower</td>
<td>Is it--</td>
</tr>
<tr>
<td>0120</td>
<td>0121</td>
<td>0122</td>
<td>0123</td>
<td>0124</td>
<td>0125</td>
</tr>
</tbody>
</table>

2. Was a self-propelled picker or stripper used to harvest the cotton from this field?

   □ YES - [Continue.] □ NO - [Go to item 3.]

   [If item 2 = YES, ask--]

   a. What is the model year of the self-propelled picker or stripper used to harvest cotton from this field? (Report the average year if more than one was used.) ....... YEAR

   [If stripper used, ask--]

   c. Did this cotton stripper have a burr extractor, or other pre-gin cleaning device? . . . YES = 1 CODE
3. Including custom operations, I need to list field work performed by machines on this field for the 2003 cotton crop. Please...
   - Begin with the first field operation after harvest of previous crop, (If fallow during 2002, list operations starting with fall 2001.)
   - If skip-row cotton, report the acres in the skip for operations that covered the skips.
   - 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? – [Go to Column 11.]

<table>
<thead>
<tr>
<th>No.</th>
<th>CODE</th>
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<td>0501</td>
<td>0502</td>
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<tr>
<td>0501</td>
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<td>0503</td>
<td>0504</td>
<td>0505</td>
<td>0506</td>
<td>0507</td>
<td>0508</td>
<td>0509</td>
<td>0510</td>
<td>0511</td>
<td>0512</td>
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<td>0515</td>
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<td>0518</td>
<td>0519</td>
<td>0520</td>
<td>0521</td>
<td>0522</td>
</tr>
</tbody>
</table>

1/ If trucks other than pick-ups are used as the power source, use truck codes in Respondent Booklet.
2/ For backhoes, disk border maker, ditch closer, ditcher, levee-plow disk, quarter drain machine, rear mounted blade, module building and hauling operations, enter TOTAL HOURS, and leave column 10 blank.
reported operating machines, that worked on this field.

Please report the paid and unpaid labor that worked on this field to produce the 2003 cotton crop.

<table>
<thead>
<tr>
<th>TYPE OF WORKERS</th>
<th>a. scouting for weeds and insects?</th>
<th>b. irrigating?</th>
<th>d. for overhead activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operator, partners, family members, and other unpaid workers</td>
<td>1100</td>
<td>1101</td>
<td>1103</td>
</tr>
<tr>
<td>Full-time hired workers (Exclude custom and contract labor)</td>
<td>1105</td>
<td>1106</td>
<td>1108</td>
</tr>
<tr>
<td>Part-time or seasonal hired workers (Exclude custom and contract labor)</td>
<td>1110</td>
<td>1111</td>
<td>1113</td>
</tr>
</tbody>
</table>

5. **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
   
6. **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

7. **Was any contract labor used on this field?**
   YES = 1
   
   a. **If YES, ask -- What was the average cost per acre for this contract labor?**
   (Include landlord and contractor costs.)
   DOLLARS & CENTS PER ACRE
   
8. **What percent of the total hours worked on this field by UNPAID workers was worked by children under 16 years old?**
9. Now I need some information on how much was spent for custom services used on this field for the 2003 cotton crop.

<table>
<thead>
<tr>
<th>1</th>
<th>CUSTOM SERVICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which of these services were done for the 2003 cotton crop on this field?</td>
<td></td>
</tr>
</tbody>
</table>

- [ ] [Check box for each service performed; refer to item F3 if necessary.]
- [ ] a. custom land preparation, shaping and/or leveling? ...........................................
- [ ] b. custom cultivating? ..........................................................
- [ ] c. custom planting and/or reseeding? ...........................................
- [ ] d. custom harvesting? ..........................................................
- [ ] e. custom module building? ...................................................
- [ ] f. custom hauling from field to gin? ...........................................

\[
\text{Dollars & Cents per unit} \times \text{Total units hauled from field} \div \text{Acres harvested in field} = \text{Dollars & Cents per acre.}
\]

- [ ] g. custom harvesting, module building and hauling from field to gin? ...........................................

\[
\text{Dollars & Cents per unit} \times \text{Total units hauled from field} \div \text{Acres harvested in field} = \text{Dollars & Cents per acre.}
\]

10. Did you hire any technical or consultant services to make recommendations for this field? (such as for nutrient, pest control, irrigation, or precision farming recommendations)

- [ ] YES - [Continue.]
- [ ] NO - [Go to item 12.]
- b. Collect soil or tissue samples? ..........................................................
- c. Pest control recommendation/management service? ...........................................
- d. Pest scouting (Exclude any activity for the BWEP or PBWP)? ...........................................
- e. Irrigation management service (i.e., irrigation scheduling)? ...........................................
- f. Yield map or remote sensing map development/interpretation? ...........................................
- g. Other custom or technical service (Specify:_________________________) ..............................

11. If YES to any of these services, what was the cost for all of these services? (Include landlord/contractor cost. Exclude cost of soil/tissue tests or scouting costs reported earlier. Do not report costs for any of these services if they were reported as part of the costs of materials and/or application costs previously.) ...........................................

<table>
<thead>
<tr>
<th>2</th>
<th>Including landlord's/contractor's cost, how much was spent for [column 1] on this field for the 2003 cotton crop?</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOLLARS &amp; CENTS PER ACRE</td>
<td></td>
</tr>
<tr>
<td>1119</td>
<td>. ___ ___</td>
</tr>
<tr>
<td>1120</td>
<td>. ___ ___</td>
</tr>
<tr>
<td>1121</td>
<td>. ___ ___</td>
</tr>
<tr>
<td>1122</td>
<td>. ___ ___</td>
</tr>
<tr>
<td>1123</td>
<td>. ___ ___</td>
</tr>
<tr>
<td>1124</td>
<td>. ___ ___</td>
</tr>
<tr>
<td>1125</td>
<td>. ___ ___</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1129</td>
</tr>
<tr>
<td>1130</td>
</tr>
<tr>
<td>1131</td>
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<tr>
<td>1132</td>
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<tr>
<td>1133</td>
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<tr>
<td>1134</td>
</tr>
<tr>
<td>1135</td>
</tr>
</tbody>
</table>

| 1136 | . ___ |
| 1137 | |

<table>
<thead>
<tr>
<th>TOTAL DOLLARS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1137</td>
</tr>
</tbody>
</table>
12. **Was there (will there be) a yield monitor on the equipment used to harvest this cotton field?** .................................................. YES = 1

    [If YES, continue; else go to item 13.]

a. Was there (will there be) a yield map produced from this harvest using information from the yield monitor? .................................. YES = 1

b. Did you use the yield monitor information to--

    Enter code for all that apply:

    (2) add/improve tile drainage? .................................. YES = 1

    (3) add/improve irrigation equipment/irrigation water application? .................................. YES = 1

    (4) conduct in-field experiments (e.g., compare fertilizer application rates, seed varieties, herbicides, pesticides, etc.)? .................................. YES = 1

    (5) negotiate new crop leases? .................................. YES = 1

    (6) document yields for crop insurance, real estate tax, or farm program purposes? .................................. YES = 1

    (7) accurately divide crop production among partners and/or for landlord crop shares? .................................. YES = 1

    (8) other uses [specify ____________________________________] .......... YES = 1

13. **During 2002 or 2003, was a GPS (Global Positioning System) device used to geo-reference and/or produce a map of the soil properties of this field?** (such as soil nitrate levels, pH, etc.) .................................. YES = 1

    [If item 13 = YES, ask 13a and 13b; else go to item 14.]

a. Was a map (or will a map be) produced based on soil tests from this field? ........ YES = 1

b. Was a map (or will a map be) produced based on a machine that measured electrical conductivity of the soil (e.g. Veris machine)? .......... YES = 1

14. **Did you have an airplane or satellite provide an image or photograph of this field either at the start of or during the 2003 growing season?** ........ YES = 1

15. **Was a variable rate applicator (i.e., variable rate technology or VRT) used on this field for--**

    a. fertilization or liming? .................................................. YES = 1

    (1) If YES, ask -- Did you use a variable rate applicator for--

        [Enter code for all that apply.]

        a. nitrogen applications? ........................................ YES = 1

        b. phosphorous applications? .................................. YES = 1

        c. potash applications? ........................................ YES = 1

        d. lime applications? ........................................... YES = 1

        e. manure applications? ........................................ YES = 1

        b. seeding? ........................................................ YES = 1

        c. pesticide applications? ..................................... YES = 1

16. **Was a guidance or parallel swathing system (connected to G.P.S.) used with any machine operation on this field (e.g. light bar)?** ........ YES = 1
1. How many acres in this field were irrigated for the 2003 cotton crop?    
   [If none, go to Section I.] .................................................. 1160

2. Now, I have some questions about irrigation systems and water used on this field for the 2003 cotton crop.

<table>
<thead>
<tr>
<th>UNIT</th>
<th>SYSTEM 1</th>
<th>SYSTEM 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. What type(s) of irrigation system(s) were used to irrigate this field? [Show System Type Codes in the Respondent Booklet. Enter System Type Code for up to two systems covering the most field acres.]</td>
<td>SYSTEM TYPE CODE</td>
<td>1161</td>
</tr>
<tr>
<td>b. What was the total quantity of water applied to this field during the entire growing season? [Include ALL water used from both on-farm and off-farm sources.]</td>
<td>INCHES PER ACRE OR TOTAL ACRE-FEET</td>
<td>1162</td>
</tr>
<tr>
<td>[If operator cannot provide item 2b, ask (1) &amp; (2)--] (1) What is the total number of hours this system was used to apply water to this field during the cotton growing season?</td>
<td>TOTAL HOURS</td>
<td>1164</td>
</tr>
<tr>
<td>(2) How many gallons per minute were applied?</td>
<td>GALLONS PER MINUTE</td>
<td>1165</td>
</tr>
<tr>
<td>c. What percent of the water used to irrigate this field through this system came from surface water sources?</td>
<td>PERCENT</td>
<td>1166</td>
</tr>
<tr>
<td>d. What was the number of times this field was irrigated during the cotton growing season using this system? [Include any pre-plant irrigation.]</td>
<td>NUMBER OF IRRIGATIONS</td>
<td>1167</td>
</tr>
<tr>
<td>e. Was the pump type-- [Enter code for most common pump type.] (If more than one pump in the system, enter type for pump closest to water source.)</td>
<td>CODE</td>
<td>1168</td>
</tr>
<tr>
<td>f. What was the average pumping rate?</td>
<td>GALLONS PER MINUTE</td>
<td>1169</td>
</tr>
<tr>
<td>g. [If item 2a = code 1-9 (PRESSURE SYSTEM), ask--] What was the system operating pressure?</td>
<td>POUNDS PER SQUARE INCH</td>
<td>1170</td>
</tr>
<tr>
<td>h. What was the primary motor type used to pump the water?</td>
<td>CODE</td>
<td>1171</td>
</tr>
<tr>
<td>i. What was the average motor size?</td>
<td>HORSE-POWER</td>
<td>1172</td>
</tr>
<tr>
<td>j. [If NO PUMP was used (item e = 99), ask--] What was the average flow rate?</td>
<td>GALLONS PER MINUTE</td>
<td>1173</td>
</tr>
<tr>
<td>k. How many other acres on this operation were irrigated using this field’s irrigation system during the 2003 growing season? [Exclude this field.]</td>
<td>ACRES</td>
<td>1174</td>
</tr>
</tbody>
</table>
3. **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 4.]

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

   b. What was the total cost for the water purchased for this field during the 2003 growing season?
      *(Include landlord and contractor costs and ditch maintenance costs.)*

4. **If Siphon Tubes were used** *(line a of item 2 = 10 or 11), ask--*
   - What would be the total cost to replace all the siphon tubes used on this field?

5. **If Poly Pipe system was used** *(line a of item 2 = 14), ask--*
   - What was the total amount spent for poly pipe used on this field during the 2003 growing season?

6. **If Gated Pipe system was used** *(line a of item 2 = 15 or 16), ask--*
   a. What was the average diameter of gated pipe used to irrigate this field?
   b. What was the total length of gated pipe used?

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

   a. How many wells were used to irrigate this field?
   b. What was the average diameter of the outer well casing?
   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.)*
   d. Did this well(s) have a water meter or other flow measurement device?
   e. Were other fields irrigated using water pumped from the well(s) that supplied water to the selected field?
      - □ YES - [Enter code 1 and continue.]
      - □ NO - [Go to item 8.]

   (1) How many other acres on this operation were irrigated using the same well(s) during the 2003 growing season?
8. Other than pipe that is part of the system, was any additional mainline or lateral pipe used to carry water from the source to this field?
   *(Include underground pipe.)*
   
   [ ] YES - [Continue.] [ ] NO - [Go to item 9.]

   a. What was the most common type of additional pipe used? .........
      
      PIPE TYPE CODES
      
      1 ALUMINUM - (NON-HI-PRESSURE)
      2 ALUMINUM - (HI-PRESSURE)
      3 STEEL
      4 PLASTIC
      5 OTHER (SPECIFY:_____________)
      
      CODE
      1204

   b. What was the average diameter *(in inches)* of the most common type of this additional pipe used? .....................
      
      CODE
      1205

   c. How many feet of this additional pipe were used to bring water to this field? ........
      
      CODE
      1206

9. Is the run-off from this field— ........
   
   RUN-OFF CODES
   
   1 retained at the end of the field?
   2 re-used to irrigate on the farm?
   3 collected in evaporation ponds on the farm?
   4 drained from the farm?
   5 there is no run off.
   
   CODE
   1207

10. Were water management practices such as irrigation scheduling, controlled drainage, or treatment of retention water used on this field to manage pests? .................. YES = 1
    
    CODE
    1650
1. [If selected field RENTED, ask--; else go to Conclusion.]
Did your landlord/contractor for this selected cotton field contribute to the cost of any of these production expense items for the 2003 crop?

[Show Landlord/contractor Cost items in the Respondent Booklet.]

- YES - [Enter 1 and continue.]
- NO - [Enter 3 and go to Conclusion.]

<table>
<thead>
<tr>
<th>Which items?</th>
<th>1</th>
<th>How much did your landlord and/or contractor spend for [column 1 item] for this field?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seed Costs</td>
<td></td>
<td>PERCENT OR TOTAL DOLLARS</td>
</tr>
<tr>
<td>a. Purchased seed</td>
<td>0841</td>
<td>0842</td>
</tr>
<tr>
<td>Fertilizer Costs (Exclude Lime and Gypsum.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Fertilizer custom applications</td>
<td>0843</td>
<td>0844</td>
</tr>
<tr>
<td>c. Fertilizer materials</td>
<td>0845</td>
<td>0846</td>
</tr>
<tr>
<td>Chemicals/Pesticides Costs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Chemical/pesticides custom applications</td>
<td>0847</td>
<td>0848</td>
</tr>
<tr>
<td>e. Chemical/pesticides materials</td>
<td>0849</td>
<td>0850</td>
</tr>
<tr>
<td>f. BWEP participation</td>
<td>0851</td>
<td>0852</td>
</tr>
<tr>
<td>g. TEXAS and California Only - PBWP participation</td>
<td>0853</td>
<td>0854</td>
</tr>
<tr>
<td>Technical Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. Soil tests or plant tissue tests</td>
<td>0855</td>
<td>0856</td>
</tr>
<tr>
<td>i. Scouting services</td>
<td>0857</td>
<td>0858</td>
</tr>
<tr>
<td>j. Develop or write plans</td>
<td>0859</td>
<td>0860</td>
</tr>
<tr>
<td>k. Biological pest controls and their application</td>
<td>0861</td>
<td>0862</td>
</tr>
<tr>
<td>Custom Field Operations and Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>l. Custom land preparation, shaping, and/or leveling</td>
<td>0863</td>
<td>0864</td>
</tr>
<tr>
<td>m. Custom cultivating</td>
<td>0865</td>
<td>0866</td>
</tr>
<tr>
<td>n. Custom planting and/or reseeding</td>
<td>0867</td>
<td>0868</td>
</tr>
<tr>
<td>o. Custom harvesting</td>
<td>0869</td>
<td>0870</td>
</tr>
<tr>
<td>p. Custom module building</td>
<td>0871</td>
<td>0872</td>
</tr>
<tr>
<td>r. Custom hauling</td>
<td>0875</td>
<td>0876</td>
</tr>
<tr>
<td>u. Custom harvesting, module building and hauling</td>
<td>0881</td>
<td>0882</td>
</tr>
<tr>
<td>v. Contract and other paid labor</td>
<td>0883</td>
<td>0884</td>
</tr>
<tr>
<td>w. Other custom and/or technical services</td>
<td>0885</td>
<td>0886</td>
</tr>
<tr>
<td>Irrigation and Water Management Costs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>z. Purchased irrigation water</td>
<td>0891</td>
<td>0892</td>
</tr>
<tr>
<td>aa. Fuel, lubrication, and electricity for irrigation</td>
<td>0893</td>
<td>0894</td>
</tr>
</tbody>
</table>
1. I need to locate the selected field of cotton on this map.

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

   Field description ........................................

**ASK FOR NORTH CAROLINA ONLY**

   Field location ........................................

   LATITUDE 0054 0055  N  __  __  __  __  W  __  __  __  __

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

3. We will need additional information to complete this study. We will contact you in February or March, 2004, to collect it. I'll call you then to set up a time that's good for you.

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

5. [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

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

**RESPONDENT**

1 OPERATOR/MANAGER
2 SPOUSE
3 ACCOUNTANT/BOOKKEEPER
4 OTHER
8 OFFICE HOLD
9 PARTNER

Respondent's name
[if code 3, 4, or 9] ........................................

Phone ................................. (_____) ........................................

**ENDING TIME [MILITARY]** ........................................

**DATE:** ........................................

**ENUMERATOR NAME** ........................................