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| **AGRICULTURAL RESOURCE MANAGEMENT SURVEY** | | | | | | | | | |
|  | | | | | | OMB No. 0535-0218  Approval Expires: 07/31/2021  Project Code: 906  SMetaKey: 1347  Phase II | | | |
|  | | | | | |
| **SURVEY_LOGO_1:USDA_logo_bw.gif** | | http://nassnet/miso/PRIME_Center/Communication_Guidelines/Official_Logos/NASS%20Graphic/nass_logo_bw.jpg | **NATIONAL**  **AGRICULTURAL**  **STATISTICS**  **SERVICE** |
|  | | | | | |  | | | |
|  |  |  |  |  |  | | National Agricultural Statistics Service  U.S Department of Agriculture  NOC Division  9700 Page Avenue, Suite 400  St. Louis, MO 63132-1547  Phone: 1-888-424-7828  Fax: 1-855-415-3687  E-mail: nass@nass.usda.gov | | |

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| **SPRING WHEAT PRODUCTION PRACTICES REPORT FOR 2019** |

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| **VERSION**  **73** | **ID**  **\_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_** | **TRACT**  **01** | **SUBTRACT**  **\_\_\_ \_\_\_** | **C-TYPE**  **124** |  |

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| **CONTACT RECORD** | | |
| DATE | TIME | NOTES |
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| INTRODUCTION:  [*Introduce yourself, and ask for the operator. Rephrase in your own words*.]  We are collecting information on practices used to produce spring wheat and need your help to make the information as accurate as possible. The information you provide will be used for statistical purposes only. Your responses will be kept confidential and any person who willfully discloses ANY identifiable information about you or your operation is subject to a jail term, a fine, or both. This survey is conducted in accordance with the Confidential Information Protection provisions of Title V, subtitle A, Public Law 107-347 and other applicable Federal laws. For more information on how we protect your information please visit: <https://www.nass.usda.gov/confidentiality>. Response to this survey is **voluntary**. We encourage you to refer to your farm records during the interview.  According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0535-0218. The time required to complete this information collection is estimated to average 50 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. | | | | | |
|  | **H H M M** |  | | **SCREENING BOX** |  |
| **BEGINNING TIME**  [*MILITARY*] | 0004 |  |  | 0006 |  |
| **\_\_\_ \_\_\_ \_\_\_ \_\_\_** |  |  |

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| [*Name, address and partners verified and updated if necessary*] | | | | | | | |
| **POID** \_\_ \_\_ \_\_ \_\_ \_\_ \_\_ \_\_ \_\_ \_\_ | | | | **POID** \_\_ \_\_ \_\_ \_\_ \_\_ \_\_ \_\_ \_\_ \_\_ | | | |
| PARTNER NAME | | | | PARTNER NAME | | | |
| ADDRESS | | | | ADDRESS | | | |
| CITY | STATE | ZIP | PHONE NUMBER | CITY | STATE | ZIP | PHONE NUMBER |
| **POID** \_\_ \_\_ \_\_ \_\_ \_\_ \_\_ \_\_ \_\_ \_\_ | | | | **POID** \_\_ \_\_ \_\_ \_\_ \_\_ \_\_ \_\_ \_\_ \_\_ | | | |
| PARTNER NAME | | | | PARTNER NAME | | | |
| ADDRESS | | | | ADDRESS | | | |
| CITY | STATE | ZIP | PHONE NUMBER | CITY | STATE | ZIP | PHONE NUMBER |

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| **A** | **SPRING WHEAT FIELD SELECTION** | **A** |

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|  | | **TOTAL PLANTED ACRES** | |
| 1. **How many total acres of spring wheat did this operation plant for the 2019 crop year?** . . . . . . . . . | | 0050 | **.\_\_\_\_** |
| [*If no acres were planted, review Screening Survey Information Form, make notes, then go to Conclusion on back page*.] | | | |
| **I will follow a simple procedure to make a random selection from the** **spring wheat fields planted for the 2019 crop.** | | | |
| 2. **What is the TOTAL number of** **spring wheat fields that were planted on this operation?**  [*If only one field, enter “1” and go to item 5.*] . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | **TOTAL NUMBER OF FIELDS PLANTED** | | |
|  | 0020 | | |

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| 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,* a*nd 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.*] |

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| --- | --- | --- |
|  |  |  |
| **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 |

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| **APPLY “RANDOM NUMBER” LABEL HERE** |  |  | **OFFICE USE**  **OY Field Substituted** |
|  |  |  | 0022 |
|  |  |  | |
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|  |  |  | |
| 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** **spring wheat questions will be about this selected spring wheat field.**  [*Be sure the operator can identify the selected field.*] | **ACRES** |

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| 6. **How many acres of spring wheat were planted in this field for the 2019 crop?** . . .. . . . . . . . . . . | 1301 | .\_\_\_ |

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

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|  | | **CODE** | **EDIT TABLE** |
| 1. **Were commercial nutrients or fertilizers applied to this field for the 2019 spring wheat crop?** (*Include those from operators, landlords, and contractors*.). . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | **YES = 1**  **No = 3** | 0202 | 0200 |
| [*If COMMERCIAL nutrient or fertilizer applied, continue; else go to Section D.*] | | | **NUMBER** |
| 2. **How many commercial nutrient or fertilizer applications were made to this field  for the 2019 crop?**  (*Include**applications made by airplanes and custom applicators*.). . . . . . . . . . . . | | | 0203 |

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| 3. **Now I need to record information for each application.** | | | | | | |
| **CHECKLIST** | | | |  | | |
| **🗸** | **INCLUDE** | **🗸** | **EXCLUDE** |  | | |
| Custom applied nutrients  or fertilizers | | Micronutrients | |  |  |  |
| Nutrients or fertilizers  applied in the fall of 2019  and those applied earlier  if this field was fallow in 2019 | | Unprocessed manure  Nutrients or fertilizers applied  to previous crops in this field | |  |  |  |
|  |  |
| Commercially prepared  manure or compost | | Lime and gypsum/landplaster | | **OFFICE USE**  **LINES IN TABLE** | **TABLE**  **001** | 0299 |

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|  |  | | | | | | |  | **APPLICATION CODES for COLUMN 6** | | | | | | |  |
|  |  | | |  | | | |  | 1 Broadcast, ground without incorporation  2 Broadcast, ground with incorporation  3 Broadcast, by aircraft  4 In seed furrow | | | | 5 In irrigation water  6 Chisel/Injected or knifed in  7 Banded in or over row  8 Foliar or directed spray | | |  |
|  | | | | | | | | | | | | | | | | |
| **L**  **I**  **N**  **E** | | **2**  **MATERIALS USED**  [*Enter percentage analysis or actual*  *pounds of plant nutrients applied per acre*.]  [*Show Common Nutrients or Fertilizers*  *in Respondent Booklet*.] | | | | | **3**  **What quantity**  **was applied**  **per acre?**  [*Leave this*  *column blank*  *if actual pounds of nutrients*  *were reported.*] | | | **4**  [Enter  material  code.]  1 Pounds  12 Gallons  19 Pounds  of actual  nutrients | **5**  **When was**  **this applied?**  1 In the fall  before seeding  2 In the spring  before seeding  3 At seeding  4 After seeding | **6**  **How was**  **this**  **applied?**  [*Refer to*  *code list above.*] | | **7**  **How many**  **acres were**  **treated**  **in this**  **application?**  **ACRES** | | |
|
|
|
|
| **N**  Nitrogen | **P2O5**  Phosphate | | **K2O**  Potash | **S**  Sulfur |
| **01** | | 31 | 32 | | 33 | 34 | 36 | | | 37 | 38 | 39 | | 40 | **.\_\_\_** | |
| **02** | | 31 | 32 | | 33 | 34 | 36 | | | 37 | 38 | 39 | | 40 | **.\_\_\_** | |
| **03** | | 31 | 32 | | 33 | 34 | 36 | | | 37 | 38 | 39 | | 40 | **.\_\_\_** | |
| **04** | | 31 | 32 | | 33 | 34 | 36 | | | 37 | 38 | 39 | | 40 | **.\_\_\_** | |
| **05** | | 31 | 32 | | 33 | 34 | 36 | | | 37 | 38 | 39 | | 40 | **.\_\_\_** | |
| **06** | | 31 | 32 | | 33 | 34 | 36 | | | 37 | 38 | 39 | | 40 | **.\_\_\_** | |
| **07** | | 31 | 32 | | 33 | 34 | 36 | | | 37 | 38 | 39 | | 40 | **.\_\_\_** | |
| **08** | | 31 | 32 | | 33 | 34 | 36 | | | 37 | 38 | 39 | | 40 | **.\_\_\_** | |

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

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| **Now I have some questions about all the biocontrols or pesticides used on this field for the 2019**  **spring wheat crop, including both custom applications and applications made by this operation.** |

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|  |  | **CODE** | **EDIT TABLE** |
| 1. **Were any herbicides, insecticides, fungicides or other biocontrols or pesticides used on this spring wheat field for the 2019 crop?** . . . . . . . . . . . . . | **YES = 1**  **NO = 3** | 0302 | 0300 |

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| **If no biocontrols or pesticides applied, go to Section E.** | | | | | | | | | | | | | | | | | |
| **Include** defoliants, fungicides, herbicides,  insecticides, and other pesticides. | | | | **Exclude** nutrients or fertilizers reported  earlier and seed treatments. | | | |  | | | | |  | |  | | | |
| **Include** biological and botanical pesticides. | | | |  | | | |  | **OFFICE USE**  **LINES IN TABLE** | | | | **TABLE**  **001** | | 0399 | |  | |
|  | | | | | | | | | |  | | | | | | | | |
| **CHEMICAL**  **PRODUCT**  **NAME** |  | **2** | **3** | | **4** | **5** | **6 OR 7** | | | | | | | | | **8** | | |
| **L**  **I**  **N**  **E** | **What products**  **were applied**  **to the selected field?**  [*Show product*  *codes from*  *Respondent*  *Booklet.*] | **Was this**  **product**  **bought in**  **liquid or dry form?**  [*Enter L or D*] | | **If this was part of a tank mix, enter line number of first product in**  **mix?** | **When**  **was this applied?**  1 BEFORE  planting  3 AT  planting  4 AFTER  planting  5 DEFOLIATION  prior to harvest | **How much was applied**  **per acre**  **per**  **application?** | | | | | **What was**  **the total**  **amount**  **applied per**  **application**  **in the selected field?** | | | | [*Enter unit code.*]  1 Pounds  12 Gallons  13 Quarts  14 Pints  15 Liquid Ounces  28 Dry Ounces  30 Grams | | |
|  | **01** | 61 |  | | 63 | 64 | 65 | | | | **.\_\_\_ \_\_\_** | 73 | | **.\_\_\_ \_\_\_** | | 74 | | |
|  | **02** | 61 |  | | 63 | 64 | 65 | | | | **.\_\_\_ \_\_\_** | 73 | | **.\_\_\_ \_\_\_** | | 74 | | |
|  | **03** | 61 |  | | 63 | 64 | 65 | | | | **.\_\_\_ \_\_\_** | 73 | | **.\_\_\_ \_\_\_** | | 74 | | |
|  | **04** | 61 |  | | 63 | 64 | 65 | | | | **.\_\_\_ \_\_\_** | 73 | | **.\_\_\_ \_\_\_** | | 74 | | |
|  | **05** | 61 |  | | 63 | 64 | 65 | | | | **.\_\_\_ \_\_\_** | 73 | | **.\_\_\_ \_\_\_** | | 74 | | |
|  | **06** | 61 |  | | 63 | 64 | 65 | | | | **.\_\_\_ \_\_\_** | 73 | | **.\_\_\_ \_\_\_** | | 74 | | |
|  | **07** | 61 |  | | 63 | 64 | 65 | | | | **.\_\_\_ \_\_\_** | 73 | | **.\_\_\_ \_\_\_** | | 74 | | |
|  | **08** | 61 |  | | 63 | 64 | 65 | | | | **.\_\_\_ \_\_\_** | 73 | | **.\_\_\_ \_\_\_** | | 74 | | |
|  | **09** | 61 |  | | 63 | 64 | 65 | | | | **.\_\_\_ \_\_\_** | 73 | | **.\_\_\_ \_\_\_** | | 74 | | |
|  | **10** | 61 |  | | 63 | 64 | 65 | | | | **.\_\_\_ \_\_\_** | 73 | | **.\_\_\_ \_\_\_** | | 74 | | |
|  | **11** | 61 |  | | 63 | 64 | 65 | | | | **.\_\_\_ \_\_\_** | 73 | | **.\_\_\_ \_\_\_** | | 74 | | |
|  | **12** | 61 |  | | 63 | 64 | 65 | | | | **.\_\_\_ \_\_\_** | 73 | | **.\_\_\_ \_\_\_** | | 74 | | |
|  | **13** | 61 |  | | 63 | 64 | 65 | | | | **.\_\_\_ \_\_\_** | 73 | | **.\_\_\_ \_\_\_** | | 74 | | |
|  | **14** | 61 |  | | 63 | 64 | 65 | | | | **.\_\_\_ \_\_\_** | 73 | | **.\_\_\_ \_\_\_** | | 74 | | |

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

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| **LINE** |  | **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.*] |
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|  | **APPLICATIONS CODES for column 9** | |  |  |  |
|  | 1 Broadcast, ground without incorporation  2 Broadcast, ground with incorporation  3 Broadcast, by aircraft  4 In seed furrow  5 In irrigation water | 6 Chisel/injected or knifed in  7 Banded in or over row  8 Foliar or directed spray  9 Spot treatments |  |  |
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|  | **9** | **10** | | **11** | **12** |  |  | | | |
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| **L**  **I**  **N**  **E** | **How**  **was this**  **product**  **applied?**  [*Enter code*  *from above*.] | **How many**  **acres in the selected**  **field were**  **treated with**  **this product?** | | **How many**  **times was it**  **applied?** | **Were these**  **applications**  **made by---**  1 Operator, partner  or family member?  2 Custom applicator?  3 Employee/Other? |  |  | |  | |
|  | |  |  |
| **ACRES** | | **NUMBER** |  |  |
| **01** | 76 | 77 | **.\_\_\_** | 79 | 80 |  |  |  |  | |
| **02** | 76 | 77 | **.\_\_\_** | 79 | 80 |  |  |  |  | |
| **03** | 76 | 77 | **.\_\_\_** | 79 | 80 |  |  |  |  | |
| **04** | 76 | 77 | **.\_\_\_** | 79 | 80 |  |  |  |  | |
| **05** | 76 | 77 | **.\_\_\_** | 79 | 80 |  |  |  |  | |
| **06** | 76 | 77 | **.\_\_\_** | 79 | 80 |  |  |  |  | |
| **07** | 76 | 77 | **.\_\_\_** | 79 | 80 |  |  |  |  | |
| **08** | 76 | 77 | **.\_\_\_** | 79 | 80 |  |  |  |  | |
| **09** | 76 | 77 | **.\_\_\_** | 79 | 80 |  |  |  |  | |
| **10** | 76 | 77 | **.\_\_\_** | 79 | 80 |  |  |  |  | |
| **11** | 76 | 77 | **.\_\_\_** | 79 | 80 |  |  |  |  | |
| **12** | 76 | 77 | **.\_\_\_** | 79 | 80 |  |  |  |  | |
| **13** | 76 | 77 | **.\_\_\_** | 79 | 80 |  |  |  |  | |
| **14** | 76 | 77 | **.\_\_\_** | 79 | 80 |  |  |  |  | |

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| **E** | **PEST MANAGEMENT PRACTICES** | **E** |

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| **Now I have some questions about your pest management decisions and practices used on this field for the 2019 spring wheat crop. By pests, we mean WEEDS, INSECTS, and DISEASES.** | | | | |
| **ENUMERATOR ACTION:** *Were PESTICIDE applications reported in Section D?*] | | | | |
| **YES** – [*Continue*] | **NO** – [*Go to item 4*] | | | **CODE** |
| 1. **Was weather data used to assist in determining either the need or when to make pesticide applications?** . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | | **YES = 1**  **NO = 3** | 0800 | |

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| 2. **Were any biological pesticides such as Bt** (*Bacillus thuringiensis*)**, insect growth regulators, neem or other natural/biological based products sprayed or applied to manage pests in this selected?** . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | **YES = 1**  **NO = 3** | | 0801 |
| 3. **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**  **NO = 3** | 0802 |
| 4. **Were records kept for the selected field to track the activity or numbers of weeds, insects or diseases?** . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | | **YES = 1**  **NO = 3** | 0823 |
| 5. **Did you use published information on infestation thresholds to determine when to take measures to manage pests in the selected field?** . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | | **YES = 1**  **NO = 3** | 0824 |

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| 6. **In 2019, how was the selected field**  **primarily scouted for insects,**  **weeds, diseases, and/or beneficial**  **organisms?** . . . . . . . . . . . . . . . . . . . . . . . . . | 1 By deliberately going to the field specifically for scouting activities [*Enter code 1 and go to item 7.*]  2 By conducting general observations while performing routine tasks [*Enter code 2 and go to item 9*.]  3 This field was not scouted.  [*Enter code 3 and go to item 11.*] |  | **CODE** |
| . . . . | 0808 |
|  | **CODE** |

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| 7. **Was an established scouting process** (*systematic sampling, recording counts, etc*.) **used**  **or were insect traps used in the selected field?** . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | **YES = 1**  **NO = 1** | 0809 |

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| 8. **Was scouting for pests done in the selected field due to---** |  | **CODE** |
| a. a pest advisory warning?. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | **YES = 1**  **NO = 1** | 0810 |
| b. a pest development model?. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | **YES = 1**  **NO = 1** | 0811 |
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|  | | | |
| 1 | | 2 | 3 |
| 9. **Was the selected spring wheat field scouted for---** | **YES = 1**  **NO = 3** | [*If* ***YES****, ask---]*  **What was the**  **infestation level for** [*column 1*] **?**  1 Higher than normal  2 Normal  3 Less than normal  **CODE** | [*If column 1 is* ***YES****, ask---]*  **Who did the majority**  **of the scouting**  **for** [*column 1*] **?**  1 Operator, partner or family member  2 An employee  3 Farm supply or chemical dealer  4 Independent crop consultant  or commercial scout  **CODE** |
| a. weeds?. . . . . . . . . . . . . . . . . . . . . . . . . . . | 0812 | 0813 | 0814 |
| b. insects or mites?. . . . . . . . . . . . . . . . . . . . | 0815 | 0816 | 0817 |
| c. diseases?. . . . . . . . . . . . . . . . . . . . . . . . . | 0818 | 0819 | 0820 |
|  | | | |
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|  |  | **CODE** |
| 10. **Did you use field mapping of previous weed problems to assist you in making weed management decisions?** . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | **YES = 1**  **NO = 3** | 0825 |

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| --- | --- | --- |
| 11. **Did you do any of the following other types of pest management practices for the specific purpose of managing or reducing the spread of pests in the selected 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**  **NO = 3** | 0841 |
| b. Plow down crop residue (*using conventional tillage*)?. . . . . . . . . . . . . . . . . . . . . . . . . . . . | **YES = 1**  **NO = 3** | 0842 |
| c. Remove/burn down crop residue?. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | **YES = 1**  **NO = 3** | 0843 |
| d. Rotate crops in the selected field during the past three years?. . . . . . . . . . . . . . . . . . . . . . | **YES = 1**  **NO = 3** | 0844 |
| e. Maintain ground covers, mulches, or other physical barriers?. . . . . . . . . . . . . . . . . . . . . . | **YES = 1**  **NO = 3** | 0845 |
| f. Choose crop variety because of specific resistance to a certain pest?. . . . . . . . . . . . . . . . | **YES = 1**  **NO = 3** | 0846 |
| g. Use no-till or minimum till?. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | **YES = 1**  **NO = 3** | 0847 |
| h. Plan planting locations to avoid cross infestation of pests?. . . . . . . . . . . . . . . . . . . . . . . . | **YES = 1**  **NO = 3** | 0848 |
| i. Adjust planting or harvesting dates?. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | **YES = 1**  **NO = 3** | 0849 |
| j. Chop, spray, mow, plow, or burn field edges, lanes, ditches,  roadways, or fence lines?. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | **YES = 1**  **NO = 3** | 0850 |
| k. Clean equipment and field implements after completing field work  to reduce the spread of pests?. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | **YES = 1**  **NO = 3** | 0851 |
| l. Adjust row spacing, plant density, or row directions?. . . . . . . . . . . . . . . . . . . . . . . . . . . . . | **YES = 1**  **NO = 3** | 0852 |
| m. Have the seed treated for insect or disease control  after you purchased the seed for the selected field?. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | **YES = 1**  **NO = 3** | 0854 |
| n. Maintain a beneficial insect or vertebrate habitat?. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | **YES = 1**  **NO = 3** | 0855 |
| o. Maintain buffer strips or border rows to isolate spring wheat  from non-organic crops or land, or did you take a buffer harvest?. . . . . . . . . . . . . . . . . . . | **YES = 1**  **NO = 3** | 0856 |
| p. Use a flamer to kill weeds?. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | **YES = 1**  **NO = 3** | 0857 |
| q. Plant earlier or later to avoid weeds? . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | **YES = 1**  **NO = 3** | 0865 |

|  |  |  |
| --- | --- | --- |
|  |  |  |
| 12. **Were any beneficial organisms (insects, nematodes, fungi) applied or released in**  **the selected field to manage pests?** . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | **YES = 1**  **NO = 3** | 0853 |
| 13. **Were floral lures, attractants, repellents, pheromone traps or other biological**  **pest controls used on the selected field?** . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | **YES = 1**  **NO = 3** | 0858 |
| 14. **Was a trap crop** (*excluding fallow*) **grown to help manage insects in the selected field?**. . | **YES = 1**  **NO = 3** | 0863 |
| 15. **Was the selected field left fallow in 2018 to help manage insects on the selected field?** . | **YES = 1**  **NO = 3** | 0864 |
| 16. **Were water management practices such as irrigation scheduling, controlled**  **drainage, or treatment of retention water used on the selected field to manage**  **pests or toxin-producing fungi and bacteria?** . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | **YES = 1**  **NO = 3** | 0861 |

17. For the selected field, were any of the following pesticide spraying practices or activities used in 2019? Pesticides include insecticides, fungicides, herbicides and plant growth regulators (PGR).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Pesticide Spraying  Practice or Activity | (1)  Was this used in 2019? | (2)  Was it specifically used to keep pesticide application(s) on-target (i.e., reduce pesticide drift)? | (3)  **(Complete column for every YES in Column 1)**  Considering labor, training, capital expenditures, and other costs, how easy or difficult was it to implement this practice or activity? | (4)  **(Complete column for every NO in Column 1)**  Why was this practice or activity NOT used?  Check all that apply. |
| Yes = 1  No = 3  Don’t Know = 2 | Yes = 1  No = 3  Don’t Know = 2 | 1 – Very Easy  2 – Somewhat Easy  3 – Somewhat Difficult  4 – Very Difficult | 1 – Cost of labor/training  2 – Cost of associated equipment/products  3 – Incompatible with current production practices (e.g., topography, equipment limitations)  4 – General time management issues/too busy  5 – Unfamiliar with activity or practice  6 – Other, specify: |
| a. Altering spray time(s) depending on weather conditions (e.g., wind speed, wind direction) |  |  |  |  |
| b. Drift reducing adjuvant(s) |  |  |  |  |
| c. Drift reducing nozzle(s) |  |  |  |  |
| d. Increased GPA spray solution |  |  |  |  |
| e. Calibrate sprayer before the season |  |  |  |  |
| f. Calibrate sprayer during the season |  |  |  |  |
| g. Manually altering sprayer settings to improve the spray precision (e.g., altering spray pressure, ground speed, and/or boom height) |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| h. Adopting the use of technologies to improve the spray precision (e.g., on/off nozzle spray technology, GPS boom section controls, automatic boom height stabilization, and/or infrared technology) |  |  |  |  |
| i. Shielded sprayers |  |  |  |  |
| j. Pulse Width Modulation (PWM) (e.g. Aim Command, Raven's Hawk Eye, John Deere's Exact Apply, etc.) |  |  |  |  |
| k. Other - Specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |  |  |

**[Enumerator Notes: Question 18 pertains to pre-emergence pesticide applications, regardless of pesticide type. Questions 19 and 20 are specific to post-emergence applications, Question 19 addressing herbicide applications and Question 20 addressing insecticide/fungicide applications.]**

18. **Pre-emergence** pesticide applications are pesticides that are applied BOTH prior to planting and/or before the

emergence of the wheat for early-season pest management. For the selected field, did this operation make any **pre-**

**emergence** pesticide applications using aerial sprayers and/or ground boom sprayers in 2019?

☐ Yes, made pre-emergence pesticide applications using aerial sprayers - Go to Item 19

☐ Yes, made pre-emergence pesticide applications using ground boom sprayers – Complete table below

☐ No, did not make pre-emergence pesticide applications - Go to Item 19

|  |  |  |  |
| --- | --- | --- | --- |
|  | Pre-emergence Pesticide Applications Using Ground Boom Sprayers | | Code |
| a. What was the typical spray volume (gallons per acre-GPA) for pre-emergence pesticide applications? | 1☐ < 5 GPA  2☐ 5 to < 7.5 GPA  3☐ 7.5 to < 10 GPA  4☐ 10 to < 15 GPA | 5☐ 15 to < 20 GPA  6☐ 20 to < 25 GPA  7☐ 25 GPA or greater  99☐ Don't know |  |
| b. What is the typical operating pressure for pre-emergence pesticide applications (PSI)? | 1☐ < 10 PSI  2☐ 10 to < 20 PSI  3☐ 20 to < 30 PSI  4☐ 30 to < 40 PSI  5☐ 40 to < 50 PSI  6☐ 50 to < 60 PSI | 7☐ 60 to < 70 PSI  8☐ 70 to < 80 PSI  9☐ 80 to < 90 PSI  10☐ 90 to < 100 PSI  11☐100 PSI or greater  99☐ Don't know |  |
| d. c. What nozzles were typically used most often for any pre-emergence pesticide applications? | 1☐ Hollow Cone  2☐ Full Cone  3☐ Disc/Core Nozzle  4☐ Flat (e.g., flat fan) | 5☐ Air-inclusion (AI), Air-induction, Venturi  6☐ Other, specify: \_\_\_\_\_\_  99☐ Don’t Know |  |
| e. d. At what ground speed was this ground boom sprayer(s) typically driven during pre-emergence pesticide applications? | 1☐ < 5 MPH  2☐ 5 to < 10 MPH  3☐ 10 to <15 MPH | 4☐ 15 to <20 MPH  5☐ 20 MPH or greater  99☐ Don't know |  |
| f. e. At what boom height above ground or crop canopy did this operation typically spray during pre-emergence pesticide applications? | 1☐ < 24 inches  2☐ 24 to < 36 inches | 3☐ 36 inches or greater  99☐ Don't know |  |
| g. f. What is the target droplet size spectrum for pre-emergence pesticide applications? | 1☐ Less than 106 microns (Extremely Fine or Very Fine)  2☐ 106-235 microns (Fine)  3☐ 236-340 microns (Medium)  4☐ 341-403 microns (Coarse) | 5☐ 404-502 microns (Very Coarse)  6☐ 503-665 microns (Extremely Coarse)  7☐ Greater than 665 microns (Ultra Coarse)  99☐ Don’t Know |  |

19. **Post-emergence** herbicide applications are made to control weeds that occur after emergence of the wheat. For this

selected field, did this operation make any **post-emergence** herbicide applications using aerial sprayers and/or ground

boom sprayers in 2019?

☐ Yes, made post-emergence herbicide applications using aerial sprayers - Go to Item 20

☐ Yes, made post-emergence herbicide applications using ground boom sprayers – Complete table below

☐ No, did not make post-emergence herbicide applications - Go to Item 20

|  |  |  |  |
| --- | --- | --- | --- |
|  | Post-emergence Herbicide Applications Using Ground Broom Sprayers | | Code |
| a. What was the typical spray volume (gallons per acre-GPA) for post-emergence herbicide applications? | 1☐ < 5 GPA  2☐ 5 to < 7.5 GPA  3☐ 7.5 to < 10 GPA  4☐ 10 to < 15 GPA | 5☐ 15 to < 20 GPA  6☐ 20 to < 25 GPA  7☐ 25 GPA or greater  99☐ Don't know |  |
| b. What is the typical operating pressure for post-emergence herbicide applications (PSI)? | 1☐ < 10 PSI  2☐ 10 to < 20 PSI  3☐ 20 to < 30 PSI  4☐ 30 to < 40 PSI  5☐ 40 to < 50 PSI  6☐ 50 to < 60 PSI | 7☐ 60 to < 70 PSI  8☐ 70 to < 80 PSI  9☐ 80 to < 90 PSI  10☐ 90 to < 100 PSI  11☐100 PSI or greater  99☐ Don't know |  |
| d. c. What nozzles were typically used most often for any post-emergence herbicide applications? | 1☐ Hollow Cone  2☐ Full Cone  3☐ Disc/Core  4☐ Flat (e.g., flat fan) | 5☐ Air-inclusion (AI), Air-induction, Venturi  6☐ Other, specify: \_\_\_\_\_\_  99☐ Don’t Know |  |
| e. d. At what ground speed was this ground boom sprayer(s) typically driven during post-emergence herbicide applications? | 1☐ < 5 MPH  2☐ 5 to < 10 MPH  3☐ 10 to <15 MPH | 4☐ 15 to <20 MPH  5☐ 20 MPH or greater  99☐ Don't know |  |
| f. e. At what boom height above ground or crop canopy did this operation typically spray during post-emergence herbicide applications? | 1☐ < 24 inches  2☐ 24 to < 36 inches | 3☐ 36 inches or greater  99☐ Don't know |  |
| g. f. What is the target droplet size spectrum for post-emergence herbicide applications? | 1☐ Less than 106 microns (Extremely Fine or Very Fine)  2☐ 106-235 microns (Fine)  3☐ 236-340 microns (Medium)  4☐ 341-403 microns (Coarse) | 5☐ 404-502 microns (Very Coarse)  6☐ 503-665 microns (Extremely Coarse)  7☐ Greater than 665 microns (Ultra Coarse)  99☐ Don’t Know |  |

20. **Post-emergence** insecticide and/or fungicide applications are made to control pests that occur after emergence of the

wheat. For the selected field, did this operation make any **post-emergence** insecticide and/or fungicide applications

using aerial sprayers and/or ground boom sprayers in 2019?

☐ Yes, made post-emergence insecticide/fungicide applications using aerial sprayers - Go to Item 21

☐ Yes, made post-emergence insecticide/fungicide applications using ground boom sprayers – Complete table below

☐ No, did not make pre-emergence pesticide applications - Go to Item 21

|  |  |  |  |
| --- | --- | --- | --- |
|  | Post-emergence Insecticide/Fungicide Applications Using Ground Boom Sprayers | | Code |
| a. What was the typical spray volume (gallons per acre-GPA) for post-emergence insecticide/fungicide applications? | 1☐ < 5 GPA  2☐ 5 to < 7.5 GPA  3☐ 7.5 to < 10 GPA  4☐ 10 to < 15 GPA | 5☐ 15 to < 20 GPA  6☐ 20 to < 25 GPA  7☐ 25 GPA or greater  99☐ Don't know |  |
| b. What is the typical operating pressure for post-emergence insecticide/fungicide applications (PSI)? | 1☐ < 10 PSI  2☐ 10 to < 20 PSI  3☐ 20 to < 30 PSI  4☐ 30 to < 40 PSI  5☐ 40 to < 50 PSI  6☐ 50 to < 60 PSI | 7☐ 60 to < 70 PSI  8☐ 70 to < 80 PSI  9☐ 80 to < 90 PSI  10☐ 90 to < 100 PSI  11☐100 PSI or greater  99☐ Don't know |  |
| d. c. What nozzles were typically used most often for any post-emergence insecticide/fungicide applications? | 1☐ Hollow Cone  2☐ Full Cone  3☐ Disc/Core Nozzle  4☐ Flat (e.g., flat fan) | 5☐ Air-inclusion (AI), Air-induction, Venturi  6☐ Other, specify: \_\_\_\_\_\_  99☐ Don’t Know |  |
| e. d. At what ground speed was this ground boom sprayer(s) typically driven during post-emergence insecticide/fungicide applications? | 1☐ < 5 MPH  2☐ 5 to < 10 MPH  3☐ 10 to <15 MPH | 4☐ 15 to <20 MPH  5☐ 20 MPH or greater  99☐ Don't know |  |
| f. e. At what boom height above ground or crop canopy did this operation typically spray during post-emergence insecticide/fungicide applications? | 1☐ < 24 inches  2☐ 24 to < 36 inches | 3☐ 36 inches or greater  99☐ Don't know |  |
| g. f. What is the target droplet size spectrum for post-emergence insecticide/fungicide applications? | 1☐ Less than 106 microns (Extremely Fine or Very Fine)  2☐ 106-235 microns (Fine)  3☐ 236-340 microns (Medium)  4☐ 341-403 microns (Coarse) | 5☐ 404-502 microns (Very Coarse)  6☐ 503-665 microns (Extremely Coarse)  7☐ Greater than 665 microns (Ultra Coarse)  99☐ Don’t Know |  |

21. Which of the following spraying practices resulted in a sprayer re-calibration in 2019? Check all that apply.

☐ a. Computer calibration alert system

☐ b. Change in product being applied

☐ c. Observed change in spray pattern or Gallons per Acre (GPA) output (e.g., from worn nozzles)

☐ d. Scheduled calibration (e.g., daily, monthly, annually)

☐ e. When moving to a different block or crop

☐ f. Other, specify: \_\_\_\_\_\_\_\_

☐ g. None of the above

|  |  |
| --- | --- |
| 22. For the selected field, how often did this operation clean the ground boom sprayer tank system in 2019? Check all that apply | ☐ 1 Before the season  ☐ 2 After the season  ☐ 3 Depended on the product(s)  ☐ 4 Regularly scheduled cleaning  ☐ 5 Other, specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  ☐ 6 Never |
|
|
| **[Enumerator Note: If Respondent answered code 1 - 5 for Item 22, answer Item 22a and 22b; else skip to Item 23]** | | |
| 22a.For each time that the ground boom sprayer was cleaned, how often was a tank cleaner used? …………………………………... | ☐ 1 Always (100%)  ☐ 2 Often (51% or more)  ☐ 3 Sometimes (50% or less)  ☐ 4 Never (0%)  ☐ 99. Don’t Know |
|
|
| 22b. Did this operation use separate spray rigs for herbicide applications? ……………….. | ☐ 1 Yes  ☐ 3 No  ☐ 2 Don’t Know |
|
|

23. For the selected field, what material were a **majority** of the nozzles made of that were used across all pesticide

applications made in 2019? Select one.

☐ a. Plastic, such as Polypropylene (i.e. Poly or PP) or other types

☐ b. Aluminum, brass, or other soft metal(s)

☐ c. Stainless steel (including hardened stainless steel)

☐ d. Porcelain or other ceramic materials

☐ e. Other, specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

24. For the selected field, what were the most common reasons for replacing the nozzles on the sprayers in 2019? Check

all that apply.

☐ a. Regularly scheduled calendar-based replacement (i.e., annually, twice annually, monthly, etc.)

☐ b. Regularly scheduled replacement based on operating time (i.e., sprayer operating hours)

☐ c. Sporadic replacement based on area covered or general intuition (i.e., it feels like the right time to change nozzles)

☐ d. Calibration problems (i.e., too high or too low a flow rate)

☐ e. Observed nozzle damage (e.g., change in spray pattern or leaks)

☐ f. Availability of new nozzle technologies

☐ g. Expert and/or consultant recommendations (e.g., Cooperative Extension, crop consultants, etc.)

☐ h. Other, please specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

☐ i. None of the above

25. For the selected field, on what proportion did this operation use hedge rows or other wind-breaking structures (that are at least one and a half times the height of the crop canopy) for drift reduction in 2019?

☐ a. 0%

☐ b. 1% to 25%

☐ c. 26% to 50%

☐ d. 51% to 75%

☐ e. 76% to 100%

☐ f. Don’t know

26. How often were the following sources of information used to inform pest management decisions in 2019?

|  |  |  |
| --- | --- | --- |
| Sources of Information | (1)  How often was this source of information used?  1 - Always (100%)  2 - Often (51% or more)  3 - Sometimes (50% or less)  4 - Never (0%)  99 Don’t Know | (2)  Which of these sources was this operation’s **PRIMARY** source of pest management decisions? Select one.  1 = Primary  3 = Not Primary |
| a. Pesticide Product Labels |  |  |
| b. University and/or Agricultural Cooperative  Extension Resources/Recommendations |  |  |
| c. Non-University literature, such as magazines or newspapers |  |  |
| d. Grower/Trade Groups |  |  |
| e. Pesticide Sales Representatives and/or Farm  Supply Distributors |  |  |
| Crop Consultants Paid for by the Operation |  |  |
| 1. Other Grower(s) |  |  |
| 1. Non-University Decision Tools |  |  |
| 1. Weather Forecasting Tools |  |  |
| 1. Other, Specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |

27. (If 26b, column 1 equals 1, 2, 3) Which of the following types of services offered by the University and/or Agricultural Cooperative Extension were most often used as sources of pest management decisions in 2019?

|  |  |
| --- | --- |
| University and/or Agricultural Cooperative Extension Services | How often was this source of information used?  1- Always (100%)  2 - Often (51% or more)  3 - Sometimes (50% or less)  4 - Never (0%)  99 - Don’t Know |
| 1. Formal presentations (e.g., annual meetings, educational trainings) |  |
| 1. Field days/ demonstration workshops |  |
| 1. Farm visits and/or one-on-one consultation |  |
| 1. Email lists |  |
| 1. Newsletters |  |
| 1. Crop and/or Pest Protection Handbook |  |
| 1. Other publications (e.g. Fact sheets) |  |
| 1. Decision tools |  |
| 1. Other, Specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 28. For the selected field, how often were the following practices used during the season to manage herbicide, fungicide and insecticide resistance in 2019? | | | | |
| Practices to Manage Resistance for  Herbicide, Fungicide and Insecticide | **(Only complete if operation uses herbicides)**  How often was each practice used on this field to manage **herbicide** resistance? | **(Only complete if operation uses fungicides)**  How often was each practice used on this field to manage **fungicide** resistance? | **(Only complete if operation uses insecticides)**  How often was each practice used on this field to manage **insecticide** resistance? |
| 1 Always (100%)  2 Often (51% or more)  3 Sometimes (50% or less)  4 Never (0%)  99. Don’t Know | 1 Always (100%)  2 Often (51% or more)  3 Sometimes (50% or less)  4 Never (0%)  99. Don’t Know | 1 Always (100%)  2 Often (51% or more)  3 Sometimes (50% or less)  4 Never (0%)  99. Don’t Know |
| 1. Field mapping weeds and/or keeping   records of field history and pesticide use to assist pesticide decisions |  |  |  |
| 1. Field Management/Sanitation Practices: |  |  |  |
| i. For weed control (e.g., crop rotation, tillage, planting cover crops, managing field borders, preventing field-to-field and within field movement of weed seed) |  |  |  |
| ii. For disease control (e.g., removing or incorporating field residue to reduce potential disease infestations, managing field borders) |  |  |  |
| iii. For insect control (e.g., removing or incorporating field residue to reduce potential insect infestations, managing field borders) |  |  |  |
| 1. Planting insect-resistant and/or disease-resistant varieties of wheat |  |  |  |
| 1. Pre-harvest and/or post-harvest control of weeds and/or disease to reduce the return of weed seeds and/or seed-borne diseases |  |  |  |
| 1. Use of pest diagnostic tools [e.g., Integrated Pest Management (IPM) treatment thresholds; predictive weather models (e.g., degree day models); pest forecasting systems, and/or assistance from diagnostic networks] |  |  |  |
| e. Pesticide Mode of Action (MOA) rotation |  |  |  |
| f. Pesticide Mode of Action (MOA) combination (i.e., tank mix or pre-mix product) |  |  |  |

29. In an effort to reduce off-target impacts to plants, pollinators, and/or beneficial insects, did this operation communicate with or consult any of the following sources in 2019? Check all that apply.

☐ a. Neighboring crop producers

☐ b. Nearby beekeepers

☐ c. A local expert, such as an Agricultural Cooperative Extension agent

☐ d. State Managed Pollinator Protection Plans, or MP3s (MP3s are state-developed efforts that intend to reduce pesticide

exposure through timely communication and coordination among beekeepers, growers, pesticide applicators, and

landowners)

☐ e. Driftwatch (Driftwatch is a voluntary communication tool that enables crop producers, beekeepers, and pesticide

applicators to work together to protect crops and apiaries through the use of mapping programs.)

☐ f. Other communication tool(s), specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

☐ g. Other, specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

30. Are the spraying practices for *other fields* on this operation similar to the spraying practices for *this selected field*?

☐ a. Yes

☐ b. No – Please explain the difference: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

☐ c. Don’t Know

43. Which of the following auditing systems, if any, did this operation participate in in 2019? Check all that apply.

☐ a. GLOBALG.A.P.

☐ b. Safe Quality Food (SQF) Program

☐ c. Other, specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

☐ d. This operation did not participate in an auditing system

☐ e. Don’t know

|  |  |  |
| --- | --- | --- |
|  |  |  |

|  |  |  |
| --- | --- | --- |
|  | Completion Code for Pest Management Data | |
|  | 1 Incomplete/Refusal | 500 |

|  |  |  |
| --- | --- | --- |
|  |  |  |

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| --- |
| **NOTES:** |

|  |  |  |
| --- | --- | --- |
|  | **CONCLUSION** |  |

|  |  |  |  |
| --- | --- | --- | --- |
| 5. To receive the complete results of this survey on the release date, go to  <http://www.nass.usda.gov/Surveys/Guide_to_NASS_Surveys/> | | |  |
| To have a brief summary emailed to you at a later date, please enter your email address | | |  |
|  | 1095 |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | | | | | **CODE** | |
| Would you like to receive a copy of the results of this survey in the mail?. . . . . . . . . . . . . . . . . | | **YES** = **1** | | | 9990 | |
| **[Thank the respondent, then review this questionnaire.]** | | | | **H H M M** | | |
| 6. **ENDING TIME** [*MILITARY*]. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | | | | 0005  \_\_\_ \_\_\_ \_\_\_ \_\_\_ | | |
| **RECORDS USED** | | | | | |  |
| 7. [Did respondent use farm/ranch records to report--] | | |  | | | **CODE** |
| a. [***fertilizer*** *data*?]. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | | | **YES = 1** | | | 0011 |
| b. [***pesticide*** *data?*]. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | | | **YES = 1** | | | 0012 |
| **SUPPLEMENTS USED** | | | | | | **NUMBER** |
| 8. [*Record the total number of each type of supplement used to*  *complete this interview.*]. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | **FERTILIZER**  **APPLICATIONS** | | | | | 0041 |
|  | **PESTICIDE**  **APPLICATIONS** | | | | | 0042 |

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| Reported by:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 9910  \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_ **19**  **M M D D** | 9911  Telephone(\_\_\_\_\_\_)\_\_\_\_\_\_\_\_\_\_\_\_ |

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| **OFFICE USE** | | | | | | | | | | | | | | | | |
| **R. Unit** | **Ptr 1 Str** | | **Ptr 2 Str** | | **Ptr 3 Str** | | | **Ptr 4 Str** | **OPS** | | | **SSO 1** | **ADJ** | **Optional Use** | | |
| 9921 | 9922 | | 9923 | | 9927 | | | 9928 | 923 | | | 9907 | 922 | 9906 | | 9916 |
| **Response** | | | | **Respondent** | | | **Mode** | | | | **Enum.** | | **POID** | | | |
| 1-Comp  2-R  3-Inac  4-Office Hold | | 9901 | | 1-Op/Mgr  2-Sp  3-Acct/Bkpr  4-Partner  9-Other | | 9902 | 2-PATI (tel)  3-PAPI (Face-to-  Face) | | | 9903 | 9998 | | 9989  **\_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_** | | | |
| **Eval.** | | **Change** | |
| 9900 | | 9985 | |