

# AGRICULTURAL RESOURCE MANAGEMENT SURVEY

OMB No. 0535-0218  
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 SurveyID: 9087 Phase 2



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## BARLEY PRODUCTION PRACTICES REPORT FOR 2023

<b>VERSION</b> 14	<b>ID</b> _____	<b>TRACT</b> 01	<b>SUBTRACT</b> _____	<b>C-TYPE</b> 103
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### CONTACT RECORD

DATE	TIME	NOTES

The information you provide will be used for statistical purposes only. Your response 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 and Statistical Efficiency Act of 2018, Title III of Pub. L. No. 115-435, codified in 44 U.S.C. Ch. 35 and other applicable Federal laws. For more information on how we protect your information please visit: <https://www.nass.usda.gov/confidentiality>. Response is voluntary.

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H H M M

BEGINNING TIME   
 [MILITARY]

SCREENING BOX

Check if verified POID \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

check if  
cell phone

Phone: (\_\_\_\_) \_\_\_\_\_

Check if verified POID \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

check if  
cell phone

Phone: (\_\_\_\_) \_\_\_\_\_

Check if verified POID \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

check if  
cell phone

Phone: (\_\_\_\_) \_\_\_\_\_

Check if verified POID \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

check if  
cell phone

Phone: (\_\_\_\_) \_\_\_\_\_

Total Planted Acres

1. How many total acres of barley did this operation plant for the 2023 crop year?.....

0050

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

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

Total Number Of Fields Planted

2. What is the total number of barley fields that were planted on this operation? [If only one field, enter "1" and go to item 4.].....

0020

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

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

Field description:

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

Acres

5. How many acres of barley were planted in this field for the 2023 crop?.....

1301

Office Use  
OY Field Substituted

0022

	Code	Office Use Edit Table
1. Were commercial nutrients or fertilizers applied to the selected field for the 2023 barley crop? INCLUDE those from operators, landlords, and contractors.....	0202	0200
	Yes=1 No=3	

[If commercial nutrient or fertilizer applied, continue, else go to Section D.]

2. How many commercial nutrient or fertilizer applications were made to the selected field for the 2023 crop? INCLUDE applications made by airplanes and custom applicators.....	Number 0203
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3. [Now I need to record information for each application.]

CHECKLIST		
INCLUDE	EXCLUDE	
<input type="checkbox"/> Custom applied nutrients or fertilizers	<input type="checkbox"/> Micronutrients	
<input type="checkbox"/> Nutrients or fertilizers applied in the fall of 2022 and those applied earlier if the selected field was fallow in 2022.	<input type="checkbox"/> Unprocessed manure	
<input type="checkbox"/> Commercially prepared manure or compost	<input type="checkbox"/> Nutrients or fertilizers applied to previous crops in the selected field	
	<input type="checkbox"/> Lime and gypsum/land plaster	
		Office Use Lines in Table
		Table 001
		0299

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

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

LINE	2 Materials Used [Enter percentage analysis or actual pounds of plant nutrients applied per acre.] [Show Common Nutrients or Fertilizers in Respondent Booklet] [Refer to nitrogen code list above for type of nitrogen used.]					3 What quantity was applied per acre?  [Leave this column blank if actual nutrients were reported]	4 [Enter material code]  1 Pounds 12 Gallons 13 Quarts 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 in the selected field were treated in this application?  Acres
	N Nitrogen	P <sub>2</sub> O <sub>5</sub> Phosphate	K <sub>2</sub> O Potash	S Sulfur	Source/Form of N Used [Refer to code list above]					
	31	32	33	34	35					
01	31	32	33	34	35	36	37	38	39	40
02	31	32	33	34	35	36	37	38	39	40
03	31	32	33	34	35	36	37	38	39	40
04	31	32	33	34	35	36	37	38	39	40
05	31	32	33	34	35	36	37	38	39	40
06	31	32	33	34	35	36	37	38	39	40
07	31	32	33	34	35	36	37	38	39	40
08	31	32	33	34	35	36	37	38	39	40
09	31	32	33	34	35	36	37	38	39	40
10	31	32	33	34	35	36	37	38	39	40

Now I have some questions about all the biocontrols or pesticides used on the selected field for the 2023 barley crop, including both custom applications and applications made by this operation.

	Code	Office Use Edit Table
1. Were any herbicides, insecticides, fungicides or other biocontrols or pesticides used on this barley field for the 2023 crop?.....	0302	0300
Yes=1 No=3		

[Probe for applications made in the fall of 2022 and those made earlier if the selected field was fallow.]

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

INCLUDE defoliant, fungicides, herbicides, insecticides, and other pesticides INCLUDE biological and botanical pesticides.	EXCLUDE adjuvants, nutrients or fertilizers reported earlier and seed treatments.	Office Use Line in Table	Table 001	0399
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Chemical Product Name	LINE	2	3	4	5	6 OR	7	8
		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	62	63	64	65	73	74
	02	61	62	63	64	65	73	74
	03	61	62	63	64	65	73	74
	04	61	62	63	64	65	73	74
	05	61	62	63	64	65	73	74
	06	61	62	63	64	65	73	74
	07	61	62	63	64	65	73	74
	08	61	62	63	64	65	73	74
	09	61	62	63	64	65	73	74
	10	61	62	63	64	65	73	74
	11	61	62	63	64	65	73	74
	12	61	62	63	64	65	73	74
	13	61	62	63	64	65	73	74
	14	61	62	63	64	65	73	74

2. For biocontrols or pesticides not listed in the Respondent Booklet, specify—

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)

## Applications Codes for Column 9

- |   |                                  |
|---|----------------------------------|
| 1 Broadcast, ground without incorporation | 6 Chiseled/injected or knifed in |
| 2 Broadcast, ground with incorporation    | 7 Banded in or over row          |
| 3 Broadcast, by aircraft                  | 8 Foliar or directed spray       |
| 4 In seed furrow                          | 9 Spot treatments                |
| 5 In irrigation water                     |                                  |

L I N E	9	10	11	12
	How was this product applied? [Enter code from above.]	How many acres in the selected field were treated with this product?  Acres	How many times was it applied?  Number	Were these applications made by-- 1 Operator, partner, or family member? 2 Custom applicator? 3 Employee/Other?
01	76	77	79	80
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

Now I have some questions about your pest management decisions and practices used on the selected field for the 2023 barley crop. By pests, we mean weeds, insects, and diseases.

[Enumerator Action: Were pesticide applications reported in Section D?]

Yes - Continue     No - Go to item 6

- |  |               |              |
|--|---------------|--------------|
| 1. Were weather data used to assist in determining either the need or when to make pesticide applications?.....  | Yes=1<br>No=3 | Code<br>0800 |
| 2. Were any biological pesticides such as Bt ( <i>Bacillus thuringiensis</i> ), insect growth regulators, neem or other natural/biological based products sprayed or applied to manage pests in the selected field?..... | Yes=1<br>No=3 | Code<br>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<br>No=3 | Code<br>0802 |

[Enumerator Action: Were herbicide (pesticide product codes 10000-99000) applications reported in Section D, item 1, column 2?]

Yes - Continue     No - Go to item 6

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

- |  |  |              |
|--|--|--------------|
| 8. In 2023, 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 9.]<br>2 By conducting general observations while performing routine tasks [Enter code 2 and go to item 10.]<br>3 The selected field was not scouted. [Enter code 3 and go to item 12.] | Code<br>0808 |
|--|--|--------------|

- |   |               |              |
|---|---------------|--------------|
| 9. Was an established scouting process such as systematic sampling, recording counts, etc. used or were insect traps used in the selected field?..... | Yes=1<br>No=3 | Code<br>0809 |
|---|---------------|--------------|

- |  |               |              |
|--|---------------|--------------|
| 10. Was scouting for pests done in the selected field due to — |               |              |
| a. a pest advisory warning?.....                               | Yes=1<br>No=3 | Code<br>0810 |
| b. a pest development model?.....                              | Yes=1<br>No=3 | Code<br>0811 |

1		3	4
		[If Yes, ask—] What was the infestation level for [column 1]?	[If column 2 = Yes, ask] Who did the majority of the scouting for [column 1]?
11. Was this barley field scouted for—	Yes=1 No=3	1 Higher than normal 2 Normal 3 Lower than normal	1 Operator, partner or family member 2 An employee 3 Farm supply or chemical dealer 4 Independent crop consultant or commercial scout
Code		Code	Code
a. weeds?.....	0812	0813	0814
b. insects or mites?.....	0815	0816	0817
c. diseases?.....	0818	0819	0820

		Code
12. Did you use field mapping of previous weed problems to assist you in making weed management decisions?.....	Yes=1 No=3	0825
13. Did you do any of the following other types of pest management for the specific purpose of managing or reducing the spread of pests in the selected field?		Code
a. Use the services of a diagnostic laboratory for pest identification or soil plant tissue pest analysis for the selected 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 barley 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
		Code
14. Were any beneficial organisms, such as insects, nematodes, or fungi, applied or released in the selected field to manage pests?.....	Yes=1 No=3	0853
15. Were floral lures, attractants, repellants, pheromone traps, or other biological pest controls used on the selected field?.....	Yes=1 No=3	0858
		Code
16. Was a trap crop, excluding fallow, grown to help manage insects in the selected field?.....	Yes=1 No=3	0863
17. Was the selected field left fallow in 2022 to help manage insects on the selected field?.....	Yes=1 No=3	0864
		Code
18. 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

Completion Code for Pest Management Data	
1 Incomplete/Refusal	0500

**CONCLUSION**

[Enumerator Note: Thank the respondent, then review this questionnaire.]

Office Use Only				
Ending Time (Military)		OR	Total Hours	
Hours	Minutes		Hours	Minutes
0005		0008		

1. Ending time.....

2. Records Use

[Did respondent use farm/ranch records to report—]

[fertilizer data].....	Yes=1 No=3	Code 0011	[pesticide data].....	Yes=1 No=3	Code 0012
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3. Supplements Used

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

Fertilizer Supplement.....	Number 0041	Pesticide Supplement.....	Number 0042
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**Contact Information**

Operator Email:

Operator Phone:

9929	9917 Check to receive results by email <input type="checkbox"/>	9918 ( ) _____	check if cell phone <input type="checkbox"/>
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Operation Email: (if different from above)

Operation Phone: (if different from above)

9937	9920 Check to receive results by email <input type="checkbox"/>	9936 ( ) _____	check if cell phone <input type="checkbox"/>
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Respondent Name:

Respondent Phone (if different from above)

9912	9911 ( ) _____	check if cell phone <input type="checkbox"/>	9910 MM DD YY Date: ____
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This completes the survey. The results will be available on the release date at [nass.usda.gov/results](http://nass.usda.gov/results)

Thank you for your help.

OFFICE USE									
R. Unit	Ptr 1 Str	Ptr 2 Str	Ptr 3 Str	Ptr 4 Str	OPS	SSO 1	Optional Use		
9921	9922	9923	9927	9928	923	9907	9906	9908	9916
Response		Respondent		Mode		Enum.	POID		
1-Comp 2-R 3-Inac 4-Office Hold 5-R - Est 6-Inac - Est 7-Off Hold - Est	9901	1-Op/Mgr 2-Sp 3-Acct/Bkpr 4-Partner 9-Other	9902	1-PASI (Mail) 2-PATI (tel) 3-PAPI (Face-to-Face) 4-CATI 5-Web 6-E-mail 7-Fax 8-CAPI 19-Other	9903	9998	9989		
						9900	922	9985	
							Eval.	ADJ	Change