

Weed Management Survey - Rice

Demographics

1. Which of the following best describe your employment?
 - a. Farmer
 - b. Consultant
 - c. Industry representative (sales, tech service, distribution, etc.)
 - d. Other (explain)
2. How many rice acres did you farm or scout this year?
3. How long have you been actively involved in rice production?
 - a) 5 years or less
 - b) 6-10 years
 - c) 11-15 years
 - d) 16-20 years
 - e) 21-25 years
 - f) 26-30 years
 - g) More than 30 years
4. County(ies) farmed or scouted in:

General Weed Control

5. What percentage of the rice acres you farm, or scout are continuous rice (3 years consecutive rice or more)?
 - a. 0-9%
 - b. 10-19%
 - c. 20-29%
 - d. 30-39%
 - e. 40-49%
 - f. $\geq 50\%$
6. What is the limitation for crop rotation? (check all that apply)
 - a. Landowner requirements
 - b. Zero-grade fields
 - c. Field/soil type
 - d. Commodity price/profitability
 - e. Other _____

7. Average cost of herbicides for weed control each year?
- Less than 80 \$/acre
 - 80 – 99 \$/acre
 - 100 – 119 \$/acre
 - 120 – 139 \$/acre
 - 140 – 159 \$/acre
 - 160 – 179 \$/acre
 - 180 – 199 \$/acre
 - Greater than 200 \$/acre
8. Rank in order of importance what drives the selection of your first postemergence herbicide for weed control?
- Weed species emerged
 - Field history
 - Known resistance
 - Previous year's herbicide program
 - Crop injury concerns
 - Price
9. What are your three most problematic weeds in paddy rice? Rank them based on importance, with #1 being most important.
10. What are your three most problematic weeds in furrow-irrigated rice? Rank them based on importance, with #1 being most important.
11. Provide 2 areas of weed management research that would benefit your operation's profitability and/or overall weed control.
- _____
 - _____
12. Rate the importance of the current research or educational efforts on a scale of 1 to 5, where 1 = not important; 2 = rarely important; 3 = occasionally important; 4 = important; and 5 = very important.
- Rice tolerance to new herbicides
 - Effective, nonchemical approaches to weed management
 - Impact of off-target herbicide movement and injury to rice
 - Herbicide resistance screening program (ex. Barnyardgrass, annual sedge)
 - Development of new herbicide options
 - Performance of current herbicides
 - Economical weed control programs
 - Control strategies for herbicide-resistant weeds

- i. Strategies to reduce the occurrence and spread of resistant weeds
- j. Expansion of weed control options in row rice
- k. Impact of uncontrolled weeds on rice yields and overall economics
- l. Application optimization (nozzles, spray volume, adjuvants, etc.)

Herbicide-resistant Weeds

13. Rate your concern with herbicide resistant weeds (select most appropriate)
- a. None
 - b. Slight
 - c. Moderate
 - d. High
14. Do you suspect herbicide-resistant weeds (excluding barnyardgrass) in the rice fields you scout?
- a. No
 - b. Yes
15. Provide the weeds (excluding barnyardgrass) and herbicide to which they are resistant.
16. What strategies are you using to control the herbicide-resistant weeds you listed above?
(choose up to 3 strategies)
- a. Alternative herbicides
 - b. Crop rotation
 - c. Seedbank management
 - d. Cover crops
 - e. Fall deep tillage
 - f. Seed (trait) selection
 - g. Pinpoint flood
 - h. Earlier planting dates
17. Are you doing anything to minimize the occurrence of new herbicide-resistant weeds or spread of resistance?
- a. No
 - b. Yes
18. If yes, please explain what you are doing.

Barnyardgrass

19. What percent of fields you farm or scout has barnyardgrass?

20. What percent of your overall herbicide expenses this year was for barnyardgrass control?

_____ (%)

21. What percent of the time do you fail to effectively control barnyardgrass with your first postemergence herbicide application?

_____ (%)

22. Do you have herbicide-resistant barnyardgrass on your farm? _____

a. If yes, to what herbicides are barnyardgrass resistant? (check all that apply)

- i. Command
- ii. Prowl
- iii. Bolero
- iv. Facet
- v. ALS Inhibitors (Newpath/Preface, Grasp, Beyond/Postscript, Regiment)
- vi. Clincher/Ricestar/Provisia
- vii. Propanil
- viii. Loyant
- ix. Roundup (pre-plant)

b. What herbicides are still effective for barnyardgrass on your farm? (check all that apply)

- i. Command
- ii. Prowl
- iii. Bolero
- iv. Facet
- v. ALS Inhibitors (Newpath/Preface, Grasp, Beyond/Postscript, Regiment)
- vi. Clincher/Ricestar/Provisia
- vii. Propanil
- viii. Loyant
- ix. Roundup (pre-plant)

23. Have you submitted a barnyardgrass sample to the Herbicide Resistance Screening Program with the U of A System Division of Agriculture in the past 5 years? _____

If yes, does this service help you make informed decisions in subsequent years? _____

24. How much average yield loss do you attribute to barnyardgrass in your rice?

- a. 0-4 bu/acre
- b. 5-9 bu/acre
- c. 10-19 bu/acre
- d. 20-29 bu/acre
- e. 30-39 bu/acre
- f. ≥40 bu/acre

25. In the most heavily infested fields, how much yield loss occurs (maximum loss)?

- a. 0-14 bu/acre
- b. 15-29 bu/acre
- c. 30-44 bu/acre
- d. 45-59 bu/acre
- e. 60-74 bu/acre
- f. 75-89 bu/acre
- g. ≥ 90 bu/acre

26. Rank the importance of the following factors in causing failure of herbicides to control barnyardgrass on your farm or scouted acres.

1 = highly important; 2 = moderately important; 3 = slightly important; 4 = not important

Resistance _____

Lack of adequate coverage _____

Environmental conditions _____

Size at application _____

Herbicide selection _____

27. If the initial herbicide application for barnyardgrass control fails, on average, how many additional applications are required to control it?

- a. One
- b. Two
- c. Three
- d. I never control it

28. Which of the following densities would best describe the barnyardgrass population on your farm if herbicides **were not applied**? (choose only one)

- a. No barnyardgrass present
- b. 0.1 to 0.9 plants per 10 ft²
- c. 1 to 9 plants per 10 ft²
- d. 10 to 99 plants per 10 ft²
- e. 100 to 999 plants per 10 ft²
- f. 1,000 or greater plants per 10 ft²

29. Which of the following densities best describe the barnyardgrass population in your 2020 rice crop at harvest? (choose only one)

- a. No barnyardgrass present
- b. 0.1 to 0.9 plants per 10 ft²
- c. 1 to 9 plants per 10 ft²
- d. 10 to 99 plants per 10 ft²

- e. 100 to 999 plants per 10 ft²
- f. 1,000 or greater plants per 10 ft²

30. What strategies are you implementing to manage barnyardgrass? (choose up to 3 strategies)

- a. Alternative herbicides
- b. Crop rotation
- c. Seedbank management
- d. Cover crops
- e. Fall deep tillage
- f. Seed (trait) selection
- g. Pinpoint flood
- h. Earlier planting dates