**Supplementary Appendix S1**

**Part 1: Respondent’s demographic.**

1. What is your age?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What is your educational level?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. How long (year) have you been involved in rice farming?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_years

1. What is your main job?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What is the size of the cultivation area you are working on?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_hectare

**Part 2: Adeptness in recognizing weedy rice and their management practice.**

1. Is it easy to differentiate between weedy rice and rice cultivars?

Yes No

1. What is your strategy to reduce weedy rice infestation?

Implement water seeding Use Clearfield® technology

Implement transplanting system Weedy rice rouging

Others: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Part 3: Clearfield® rice technology**

1. Using the scale 1-4 with 4 being the highest factor, based on your experience, what are the obstacles of adopting Clearfield® rice technology?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Factors** | **Scale**  1=Strongly disagree; 2=Disagree; 3=Agree 4=Strongly agree | | | |
| Difficulty in obtaining the registered OnDutyTM and certified Clearfield® rice seeds | 1 | 2 | 3 | 4 |
| Clearfield® rice technology packages are expensive (seeds and herbicides) | 1 | 2 | 3 | 4 |
| There are many rules to follow when using Clearfield® rice technology | 1 | 2 | 3 | 4 |
| Insufficient information on Clearfield® rice technology’s SOP | 1 | 2 | 3 | 4 |
| Evolution of weedy rice which is resistant to OnDutyTM | 1 | 2 | 3 | 4 |
| The use of OnDutyTM reduced growh of non- Clearfield® rice varieties in the succeeding season | 1 | 2 | 3 | 4 |

1. From where do you obtain the Clearfield® rice seeds?

Certified seeds from factory Pesticide shop

Authorized agencies under the agriculture department Farmers’ save seeds

Uncertified seeds from factory Online/internet

1. Where do you buy OnDutyTM herbicide?

Included with seed package Other growers

Pesticide shop Authorized agencies under the agriculture department

1. Have you ever planted Clearfield® rice without spraying OnDutyTM?

Yes No

1. What is the recommended rate for OnDutyTM?

½ sachet/seed bag 1 sachet/seed bag 2 sachets/seed bag

1. When is OnDutyTM recommended to spray in the Clearfield® Production System?

0 to 7 DAS 15 to 20 DAS When weedy rice emerge

8 to 14 DAS 21 to 30 DAS

1. How many seasons have you been cultivating Clearfield® rice consecutively?

Less than 2 seasons 4 to 5 seasons 8 to 9 seasons

2 to 3 seasons 6 to 7 seasons More than 10 seasons

1. How long has the weedy rice been resistant to OnDutyTM in your area?

No resistant case 3 to 4 seasons 7 to 8 seasons

1 to 2 seasons 5 to 6 seasons More than 9 seasons