V20160523 Producer's ID |__|__|-|__|__|-||__|__|

Attriters' Practices Survey 2015 (PIAFEM)

Date (dd/mm/yyyy): |__|__|-|__|__|- |__|__|__|__|	Editor's ID: |__|__|__|
Enumerator's name:	Enumerator's ID: |__|__|__|
Start time (HH:MM): |__|__|:|__|__|	Finish time (HH:MM): |__|__|:|__|__|

Qué Funciona para el Desarrollo, a non-profit organization dedicated to the evaluation of social programs, together with ITAM researchers are performing the evaluation final phase of the **Research and Support to Maize Fertilization Pilot Program (PIAFEM) for the year 2015**. You signed up to the program early last year but decided not to participate in some stages of the evaluation, we would like to gather information about your practices **in the plot registered to the program and if you suffered any weather disaster.** This information is strictly confidential and will only be used for statistical purposes to improve the design of the support program. Your name will not be published along with identifiable information. Your participation is voluntary and you may choose not to answer any given question.

Is it clear that you have the right to participate or not in this survey?

1. ☐ Yes 2. ☐ No → **EXPLAIN AND ASK AGAIN UNTIL THE INFORMATION IS CLEAR**

GENERAL INSTRUCTIONS FOR THE ENUMERATOR:

- **BE CAREFUL WHEN REPORTING MEASURING UNITS. SOME QUESTIONS REFER TO TOTAL QUANTITIES AND OTHERS TO PER HECTARE.**
- **IF RESPONDENT DOES NOT KNOW THE ANSWER TO A QUESTION WRITE -888, IF HE/SHE DECIDES NOT TO ANSWER WRITE -999 AND IF NOT APPLICABLE WRITE -777.**
- **CHARTS WITH QUESTIONS BY PLOT, MAKE ALL QUESTIONS FOR EACH PLOT AND THEN GO TO NEXT PLOT (DO NOT ASK EACH QUESTION FOR ALL PLOTS AT A TIME).**
- **INDICATIONS FOR THE ENUMERATOR ARE HIGHLIGHTED, IN CAPITAL LETTERS AND ARE NOT READ TO THE PRODUCER.**

IF THE PRODUCER IS AN ELDERLY PERSON AND A RELATIVE OR TENANT HAS BEEN WORKING ON THE PLOT FOR A LONG TIME, IS REQUIRED FOR THIS INDIVIDUAL TO BE PRESENT DURING THE INTERVIEW TO ANSWER THE QUESTIONS ABOUT PRACTICES IN THE CROPS.

ENUMERATOR COMMENTS: _____

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EDITOR COMMENTS: _____

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I received a Chedraui voucher No. _____ in compensation for the participation with a value of 100 pesos. I understand the card will be activated a week after performing the survey.
Signature: _____

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1. LOCATION AND GENERAL INFORMATION OF THE PRODUCER

ENUMERATOR CONFIRM THE PLOT AND PRODUCER INFORMATION

1.1. Producer's Name: **JOSE DANIEL ANTONIO CARRASCO LOPEZ** 1.2. ID **.20.02.03.** 1.3. Address **CALLE FRANCISCO VILLA #10, MORELOS, JOSE MARIA MORELOS, APIZACO** 1.4. Between streets: **PRIMERO DE AGOSTO Y LIBERTAD** 1.5. Telephone number(s): **2411071009** 1.6. Treatment: **T4** 1.7. Stopped participation in the evaluation survey: **FUERTA ENTRE B1 Y B2** 1.8. Reason for which he/she stopped participating: **NO LE INTERESA EL PROGRAM** 1.9. Sowed maize **???**	1.10. Name of the person working the plots: _____ 1.11. Alias: _____ 1.12. Age: _____ Years old as today 1.13. Gender: 1. ☐ Female 2. ☐ Male 1.14. Address: _____ 1.15. House reference: _____ 1.16. Between streets: _____ y _____ 1.17. Telephone number(s): _____ 1.18. Treatment plot**: TERRENOS DE JUNTO A LA HONGUERA** located **in EJIDO LAS LOMAS (ID .20.02.03.01.)** 1.19. Surface**: 2 HECTAREAS**

2. PRODUCER'S USE OF TIME

2.1 Besides your occupation in agriculture, do you have any other occupation in which you receive income?	2.2 What is your occupation? **CHECK ALL THAT APPLY**	2.3 How many hours per week do you put in in these(ose) activity(ies)?	2.4 How many hours per week do you put in your plots?
☐1 Yes ☐2 No → **Go to 2.4** ☐-888 DK ☐-999 DA	☐1 Builder ☐2 Driver ☐3 Field work hand ☐4 Professional (teacher, agronomist, etc.) ☐5 Businessman ☐6 Rancher ☐7 Night watchman ☐8 Laborer ☐9 Other: _____	|__|__|__|__| hours ☐-888 DK ☐-999 DA	|__|__|__|__| horas ☐-888 DK ☐-999 DA

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3. AGRICULTURAL PRACTICES

3.0. Soil Preparation

ENUMERATOR READ: I will now ask you about some questions about the plot enrolled in the program **[TREATMENT PLOT]**

Plot's ID **|__|__|-|__|__|-||__|__|-||__|__|**

3.0.1 In the 2015 Spring-Summer cycle, did you perform soil preparation activities on your **trail hectare**?	3.0.2 How many times did you perform each activity? **ENTER 0 IF AN ACTIVITY WAS NOT PERFORMED, -888 DK, -999 DA**	3.0.3 On average, how much did each activity cost? Indicate the price **per hectare** **ENTER -888 DK -999 DA -777 DIDN'T PERFORMED THIS ACTIVITY**	3.0.4 Did you apply organic fertilizers or soil improvers before sowing?
☐ 1 Yes ☐ 2 No → **GO TO NEXT 3.0.4.** ☐ -888 DK ☐ -999 DA	1. Rake/pre-fallow |__|__|__|__|__| times 2. Subsoiling |__|__|__|__|__| times 3. Fallow |__|__|__|__|__| times 4. Hoeing |__|__|__|__|__| times 5. Other 1: _____ |__|__|__|__|__| times 6. Other 2: _____ |__|__|__|__|__| times	1. Rake/pre-fallow |__|__|__|__|__| $/ha 2. Subsoiling |__|__|__|__|__| $/ha 3. Fallow |__|__|__|__|__| $/ha 4. Hoeing |__|__|__|__|__| $/ha 5. Other 1: _____ |__|__|__|__|__| $/ha 6. Other 2: _____ |__|__|__|__|__| $/ha	☐ 1 Yes ☐ 2 No → **GO TO S.3.1.** ☐ -888 DK ☐ -999 DA

[PRODUCT]	3.0.5 Did you apply **[PRODUCT]** before the 2015 Spring-Summer sowing cycle?	3.0.6 How much **[PRODUCT]** **per hectare** did you apply before the sowing?	3.0.7 How did you get it? **CHECK ALL THAT APPLY**	3.0.8 From the **[R 3.0.6]** bulges/kilograms that you applied, how many bulges/kilograms of **[PRODUCT]** did you obtain via:?	3.0.9 What was the total **per hectare** cost of **[PRODUCT]**?
A) Organic fertilizer	☐ 1. Yes ☐2. No →**GO TO NEXT PRODUCTO** ☐-888 DK ☐-999 DA	|__|__|__|__|__| ☐ 1. kg ☐ 2. 25 kg Bulge ☐ 3. 50 kg Bulge	☐1. From his/her animals	|__|__|__|__| ☐ 1 kg ☐ 2 25kg B ☐ 3. 50kg B	|__|__|__|__| $/ha
			☐2. Government's subsidized price purchase	|__|__|__|__| ☐ 1 kg ☐ 2 25kg B ☐ 3. 50kg B	|__|__|__|__| $/ha
			☐3. Government fertilizers delivery	|__|__|__|__| ☐ 1 kg ☐ 2 25kg B ☐ 3. 50kg B	|__|__|__|__| $/ha
			☐4 Other_____	|__|__|__|__| ☐ 1 kg ☐ 2 25kg B ☐ 3. 50kg B	|__|__|__|__| $/ha
B) Soil improvers	☐ 1. Yes ☐2. No →**GO 3.0.10.** ☐-888 DK ☐-999 DA	|__|__|__|__|__| ☐ 1. kg ☐ 2. 25 kg Bulge ☐ 3. 50 kg Bulge	☐1. Purchased from distributor at normal price	|__|__|__|__| ☐ 1 kg ☐ 2 25kg B ☐ 3. 50kg B	|__|__|__|__| $/ha
			☐2. Government's subsidized price purchase	|__|__|__|__| ☐ 1 kg ☐ 2 25kg B ☐ 3. 50kg B	|__|__|__|__| $/ha
			☐3. Government delivery	|__|__|__|__| ☐ 1 kg ☐ 2 25kg B ☐ 3. 50kg B	|__|__|__|__| $/ha
			☐4 Other_____	|__|__|__|__| ☐ 1 kg ☐ 2 25kg B ☐ 3. 50kg B	|__|__|__|__| $/ha

3.0.10 How much did you spend in the organic fertilizer and/or soil improver transportation from the place of purchase to your plot?	|__|__|__|__|__| $ ☐-888 DK ☐-999 DA
3.0.11 The organic fertilizer and/or soil improver implementation was manual or mechanical?	☐1. Manual →**GO S.3.1** ☐2. Mechanical ☐3. Both
3.0.12 What was the **per hectare** cost of the machinery?	|__|__|__|__|__| $/ha ☐-888 DK ☐-999 DA

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3.1. 2015 Sowing

3.1.1 How many furrows in total did you sow in the **test hectare** of your plot?	3.1.2. Indicate everything you sowed in the test hectare in the 2015 Spring-Summer cycle 1 Maize 2 Oatmeal 3 Wheat 4 Barley 5 Beans 6 Sorghum 7 Tomato 8 Pumpkin 9 Amaranth 10 Other _____	3.1.3. How many furrows did you sow from the previous crops in the 2015 Spring-Summer cycle?	3.1.4. What percentage of the test hectare occupies the crop **[CROP NAME]**? **VERIFY THAT THE SUM OF THE COLUMN IS 100%**	3.1.5. In which way did you sow them?	3.1.6. In which date did you sow maize in the test hectare this year?	3.1.7. Did the soil was wet during the sowing?
|__|__| furrows ☐-888 DK ☐-999 DA	A.|__| _____	A.|__|__| furrows☐-888 DK ☐-999 DA	|__|__|__|% ☐-888 DK ☐-999 DA	☐ 1 Separated ☐ 2 Mixed ☐-777 Sowed 1 crop or didn't sow ☐-888 DK ☐-999 DA	__/__/2015 ☐-888 DK ☐-999 DA	☐ 1 Yes ☐ 2 No ☐ -888 DK ☐ -999 DA
	B.|__| _____	B.|__|__| furrows☐-888 DK ☐-999 DA	|__|__|__|% ☐-888 DK ☐-999 DA		
	C.|__| _____	C.|__|__| furrows☐-888 DK ☐-999 DA	|__|__|__|% ☐-888 DK ☐-999 DA		
	D.|__| _____	D.|__|__| furrows☐-888 DK ☐-999 DA	|__|__|__|% ☐-888 DK ☐-999 DA		
	E.|__| _____	E.|__|__| furrows☐-888 DK ☐-999 DA	|__|__|__|% ☐-888 DK ☐-999 DA		
	☐-888 DK ☐-999 DA	☐-888 DK ☐-999 DA	☐-888 DK ☐-999 DA			

3.1.8. What type of maize seeds did you sow in the 2015 Spring-Summer cycle?	3.1.9. How many seeds did you sow **per hectare**? (quantity/ha)	3.1.10. How much money in total did you spend on seeds **per hectare**?	3.1.11. How did you sow? **CHECK ALL THAT APPLY**	3.1.12. What type of machine did you use?	3.1.13. Does the seed drill is yours or was rented?	3.1.14. How much did the machinery rental cost **per hectare?**	3.1.15. How much did the fuel cost **per hectare**?
☐1. Creole	1. Creole |__|__|__|__| kg/ha	|__|__|__|__|$ ☐-888 DK ☐-999 DA	☐1 Shovel/tapapie →**GO 3.1.16** ☐2 Yoke ☐3 Mechanical ☐-888 DK ☐-999 DA	☐ 1 Precision ☐ 2 Semi-precision	☐1 Owned →**GO 3.1.15** ☐2 Borrowed →**GO 3.1.15** ☐3 Rented ☐4 Rented by QFD→**IR 3.1.16**	|__|__|__|__| $/ha →**Go to 3.1.16** ☐-888 DK ☐-999 DA	|__|__|__|__| $/ha ☐-888 DK ☐-999 DA
☐2. Improved	2. Improved |__|__|__|__| miles/ha						

3.1.16. After sowing, how many furrows did you have to re-sow in the **test hectare**?	3.1.17. After re-sowing, how many furrows in total remained with seeds or plants in the **test hectare**?	3.1.18. Indicate every crop that stayed sown after the re-sowing in your plot 1 Maize, 2 Oatmeal, 3 Wheat, 4 Barley, 5 Beans, 6 Sorghum, 7 Tomato, 8 Pumpkin, 9 Amaranth, 10.Other	3.1.19. How many furrows of the previous crops stayed sown at the end in the plot in the 2015 Spring-Summer cycle?	3.1.20. What percentage of the plot occupies the **[CROP]**? **VERIFY THAT THE SUM OF THE COLUMN IS 100%**	3.1.21. In which way did you re-sow them?	3.1.22. In which date did you re-sow maize in your plot in 2015?
|__|__|__|__| furrows **→ IF HE/SHE DIDN'T RE-SOW ENTER -777 & GO TO S.3.2**	|__|__|__|__| furrows	A. |__| B. |__| C. |__| D. |__| E. |__| ☐-888 DK ☐-999 DA	A. |__| furrows ☐-888 DK ☐-999 DA B. |__| furrows ☐-888 DK ☐-999 DA C. |__| furrows ☐-888 DK ☐-999 DA D. |__| furrows ☐-888 DK ☐-999 DA E. |__| furrows ☐-888 DK ☐-999 DA ☐-888 DK ☐-999 DA	|__|__|__|% ☐-888 DK ☐-999 DA |__|__|__|% ☐-888 DK ☐-999 DA |__|__|__|% ☐-888 DK ☐-999 DA |__|__|__|% ☐-888 DK ☐-999 DA |__|__|__|% ☐-888 DK ☐-999 DA	☐ 1 Separated ☐ 2 Mixed ☐-777 Re-sowed 1 crop or didn't re-sow ☐-888 DK ☐-999 DA	__/__/2015 ☐-777 NA ☐-888 DK ☐-999 DA

3.2. Sowing fertilization

3.2.1 Did you apply chemical fertilizers during the sowing in your **test hectare**?	☐1 Yes	☐2 No → **GO TO S.3.3**

FILTER: IF HE/SHE IS A CONTROL PRODUCER GO TO LA 3.2.6

3.2.2 Did you apply the "YARA Siembra" bundle in your plot?	☐1 Yes	☐2 No → **GO TO 3.2.5**	
3.2.3 In which date did you apply the bundle?	___/____ /2015	☐-888 DK	☐-999 DA
3.2.4 How many kilograms of the "YARA Siembra" bundle did you apply in your plot?	|__|__|__| kg	☐-888 DK	☐-999 DA
3.2.5 Did you apply any different fertilizer from the YARA bundle in your plot?	☐1 Yes	☐2 No → **GO TO 3.2.12**	

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ENUMERATOR READ: I will now ask you about the fertilizers you used in the sowing of your plot **[TREATMENT PLOT]**

[FERTILIZER]	3.2.6 Did you use **[FERTILIZER]** during sowing of the 2015 Spring-Summer cycle?	3.2.7 How much **[FERTILIZER]** did you apply in sowing **per hectare**?	3.2.8 How did you get it? **CHECK ALL THAT APPLY**	3.2.9 From the **[R 3.2.7]** bulges/kilograms that you applied, how many bulges/kilograms of **[FERTILIZER]** did you obtain via…?	3.2.10 What was the total **per hectare** cost of **[FERTILIZER]**?	3.2.11 Brand of **[FERTILIZER]** 1 Agrogen 2 Yara 3 ADM 4 FYPA 5 Other (Specify) -888 DK -999 DA
A) Urea or White	☐ 1 Yes ☐ 2 No →**GO NEXT FERT.** ☐-888 DK ☐-999 DA	|__|__|__|__|__| ☐ 1 Kg ☐ 2 25 kg Bulge ☐ 3 50 kg Bulge	☐ 1 Purchased from distributor at normal price	|__|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__|__| $	|__|_____
			☐ 2 Government's subsidized price purchase	|__|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__|__| $	|__|_____
			☐ 3 Government fertilizers delivery	|__|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__|__| $	|__|_____
			☐ 4 Other_____	|__|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__|__| $	|__|_____
B) DAP or Black	☐ 1 Yes ☐ 2 No →**GO NEXT FERT.** ☐-888 DK ☐-999 DA	|__|__|__|__|__| ☐ 1 Kg ☐ 2 25 kg Bulge ☐ 3 50 kg Bulge	☐ 1 Purchased from distributor at normal price	|__|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__|__| $	|__|_____
			☐ 2 Government's subsidized price purchase	|__|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__|__| $	|__|_____
			☐ 3 Government fertilizers delivery	|__|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__|__| $	|__|_____
			☐ 4 Other_____	|__|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__|__| $	|__|_____
C) KCL or Red	☐ 1 Yes ☐ 2 No →**GO NEXT FERT.** ☐-888 DK ☐-999 DA	|__|__|__|__|__| ☐ 1 Kg ☐ 2 25 kg Bulge ☐ 3 50 kg Bulge	☐ 1 Purchased from distributor at normal price	|__|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__|__| $	|__|_____
			☐ 2. Government's subsidized price purchase	|__|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__|__| $	|__|_____
			☐ 3 Government fertilizers delivery	|__|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__|__| $	|__|_____
			☐ 4 Other_____	|__|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__|__| $	|__|_____
D) Triple super-phosphate	☐ 1 Yes ☐ 2 No →**GO NEXT FERT.** ☐-888 DK ☐-999 DA	|__|__|__|__|__| ☐ 1 Kg ☐ 2 25 kg Bulge ☐ 3 50 kg Bulge	☐ 1 Purchased from distributor at normal price	|__|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__|__| $	|__|_____
			☐ 2 Government's subsidized price purchase	|__|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__|__| $	|__|_____
			☐ 3 Government fertilizers delivery	|__|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__|__| $	|__|_____
			☐ 4 Other_____	|__|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__|__| $	|__|_____
E) Ammonium sulfate	☐ 1 Yes ☐ 2 No →**GO NEXT FERT.** ☐-888 DK ☐-999 DA	|__|__|__|__|__| ☐ 1 Kg ☐ 2 25 kg Bulge ☐ 3 50 kg Bulge	☐ 1 Purchased from distributor at normal price	|__|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__|__| $	|__|_____
			☐ 2 Government's subsidized price purchase	|__|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__|__| $	|__|_____
			☐ 3 Government fertilizers delivery	|__|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__|__| $	|__|_____
			☐ 4 Other_____	|__|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__|__| $	|__|_____
F) Organic fertilizer	☐ 1. Yes ☐2. No →**GO NEXT FERT.** ☐-888 DK ☐-999 DA	|__|__|__|__|__| ☐ 1 Kg ☐ 2 25 kg Bulge ☐ 3 50 kg Bulge	☐ 1 Purchased from distributor at normal price	|__|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__|__| $	|__|_____
			☐ 2 Government's subsidized price purchase	|__|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__|__| $	|__|_____
			☐ 3 Government fertilizers delivery	|__|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__|__| $	|__|_____
			☐ 4 Other_____	|__|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__|__| $	|__|_____

[FERTILIZER]	3.2.6 Did you use **[FERTILIZER]** during sowing of the 2015 Spring-Summer cycle?	3.2.7 How much **[FERTILIZER]** did you apply in sowing **per hectare**?	3.2.8 How did you get it? **CHECK ALL THAT APPLY**	3.2.9 From the **[R 3.2.7]** bulges/kilograms that you applied, how many bulges/kilograms of **[FERTILIZER]** did you obtain via…?	3.2.10 What was the total **per hectare** cost of **[FERTILIZER]**?	3.2.11 Brand of **[FERTILIZER]** 1 Agrogen 2 Yara 3 ADM 4 FYPA 5 Other (Specify) -888 DK -999 DA
G) Other _____ **SEE CATALOGUE**	☐ 1 Yes ☐ 2 No →**GO TO 3.2.12.** ☐-888 DK ☐-999 DA	|__|__|__|__| ☐ 1 Kg ☐ 2 25 kg Bulge ☐ 3 50 kg Bulge	☐ 1 Purchased from distributor at normal price	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|_____
			☐ 2 Government's subsidized price purchase	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|_____
			☐ 3 Government fertilizers delivery	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|_____
			☐ 4 Other_____	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|_____

3.2.12 How much did you spend in the fertilizer transportation from the place of purchase to your plot?	|__|__|__|__|__| $ ☐-888 DK ☐-999 DA
3.2.13 The implementation was manual or mechanical?	☐ 1 Manual → **Go to S.3.3** ☐ 2 Mechanical ☐ 3 Both
3.2.14 What was the **per hectare** cost of the fertilization machinery?	|__|__|__|__| $/ha ☐-777 Included in the seed drill ☐-888 DK ☐-999 DA

3.3. Fertilization during crop development

3.3.0.1 Without counting sowing, did you apply chemical fertilizers at least once during **the crop development** in the 2015 Spring-Summer cycle?	☐1 Yes ☐2 No →**GO TO S.3.4**
3.3.0.2 How many times did you fertilized during the crop development in the 2015 Spring-Summer cycle?	|__|__| YOU **MUST FILL UP SECCTIONS 3.3.1 and 3.3.2 ACCORDING TO THE NUMBER OF FERTILIZATIONS DONE, AS APPROPIATE.**
3.3.0.3 In which dates did you fertilize?	1. First (1st) fertilization after sowing Date: _____/_____/2015 2. Second (2nd) fertilization after sowing Date: _____/_____/2015

3.3.1 First Fertilization after sowing

ENUMERATOR READ: I will now ask you about the fertilizers you used in the first fertilization after sowing in your plot _____

VERIFY THAT HE/SHE IS A TREATMENT PRODUCER AND ASK 3.3.1.1. IF HE /SHE IS A CONTROL PRODUCER GO TO S.3.3.1.5

3.3.1.1 Did you apply any of the following YARA bundles during the first fertilization after sowing?	☐ 1 "YARA siembra" Bundle ☐ 2 "YARA segunda dosis" Bundle ☐-777 Didn't apply any YARA Bundle→**GO TO 3.3.1.5**
3.3.1.2 In which date did you apply the YARA bundle?	___/____ /2015 ☐-888 DK ☐-999 DA
3.3.1.3 How many kilograms of the YARA bundle did you apply in your plot?	|__|__|__| kg ☐-888 DK ☐-999 DA
3.3.1.4 Did you apply any fertilizer different from the YARA bundle?	☐1 Yes ☐2 No →**GO TO 3.3.1.11.**

[FERTILIZER]	3.3.1.5 Did you use **[FERTILIZER]** during the first implementation of the 2015 Spring-Summer cycle?	3.3.1.6 How much **[FERTILIZER]** did you apply **per hectare** in the first implementation**?**	3.3.1.7 How did you get it? **CHECK ALL THAT APPLY**	**3.3.1.8** From the **[R 3.3.1.6]** bulges/kilograms that you applied **[FERTILIZER]**, how many bulges/kilograms did you obtain for the first implementation via?	3.3.1.9 What was the total **per hectare** cost of **[FERTILIZER]**	3.3.1.10 Brand of **[FERTILIZER]** 1 Agrogen 2 Yara 3 ADM 4 FYPA 5 Other(Specify) -888 DK -999 DA
A) Urea or	☐ 1 Yes ☐ 2 No →**GO**	|__|__|__|__|	☐ 1 Purchased from distributor at normal price	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|

White	**NEXT FERT.** ☐-888 DK ☐-999 DA	☐ 1. kg ☐ 2. 25 kg Bulge ☐ 3. 50 kg Bulge	☐ 2 Government's subsidized price purchase	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 3 Government fertilizers delivery	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 4 Other_____	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
B) DAP or Black	☐ 1 Yes ☐ 2 No →**GO NEXT FERT.** ☐-888 DK ☐-999 DA	|__|__|__|__|__| ☐ 1. kg ☐ 2. 25 kg Bulge ☐ 3. 50 kg Bulge	☐ 1 Purchased from distributor at normal price	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 2 Government's subsidized price purchase	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 3 Government fertilizers delivery	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 4 Other_____	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
C) KCL or Red	☐ 1 Yes ☐ 2 No →**GO NEXT FERT.** ☐-888 DK ☐-999 DA	|__|__|__|__|__| ☐ 1. kg ☐ 2. 25 kg Bulge ☐ 3. 50 kg Bulge	☐ 1 Purchased from distributor at normal price	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 2 Government's subsidized price purchase	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 3 Government fertilizers delivery	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 4 Other_____	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
D) Triple super-phosphate	☐ 1 Yes ☐ 2 No →**GO NEXT FERT.** ☐-888 DK ☐-999 DA	|__|__|__|__|__| ☐ 1. kg ☐ 2. 25 kg Bulge ☐ 3. 50 kg Bulge	☐ 1 Purchased from distributor at normal price	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 2 Government's subsidized price purchase	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 3 Government fertilizers delivery	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 4 Other_____	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|

E) Ammonium sulfate	☐ 1 Yes ☐ 2 No →**GO NEXT FERT.** ☐-888 DK ☐-999 DA	|__|__|__|__|__| ☐ 1. Kg ☐ 2. 25 kg Bulge ☐ 3. 50 kg Bulge	☐ 1. Purchased from distributor at normal price	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 2. Government's subsidized price purchase	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 3. Government fertilizers delivery	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 4 Other_____	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
F) Other _____ **SEE CATALOGUE**	☐ 1 Yes ☐ 2 No →**GO TO 3.3.1.11** ☐-888 DK ☐-999 DA	|__|__|__|__|__| ☐ 1. Kg ☐ 2. 25 kg Bulge ☐ 3. 50 kg Bulge	☐ 1. Purchased from distributor at normal price	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 2. Government's subsidized price purchase	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 3. Government fertilizers delivery	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 4 Other_____	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|

3.3.1.11 How much did you spend in the fertilizer transportation from the place of purchase to your plot?	|__|__|__|__|__| $ ☐-888 DK ☐-999 DA
3.3.1.12 The implementation was manual or mechanical?	☐ 1 Manual →**GO TO 3.3.1.14** ☐ 2 Mechanical ☐ 3 Both
3.3.1.13 What was the **per hectare** cost of the fertilization machinery?	|__|__|__|__|__| $/ha ☐-888 DK ☐-999 DA
3.3.1.14 Did you cover the fertilizer after the implementation?	☐ 1 Yes ☐ 2 No ☐ -888 DK ☐ -999 DA

3.3.2 Second Fertilization after sowing

ENUMERATOR VERIFY THAT THE PRODUCER FERTILIZED TWO (2) TIMES AFTER SOWING AND ASK THIS SECTION. IF HE/SHE DIDN'T FERTILIZE TWO (2) TIMES GO TO S.3.4 HERBICIDES

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ENUMERATOR READ: I will now ask you about the fertilizers you used in the second fertilization after sowing in your hectare of plot_____

IF HE/SHE IS A CONTROL PRODUCER GO TO 3.3.2.5

3.3.2.1 Did you apply any of the following YARA bundles during the second fertilization after sowing?	☐1 "YARA siembra" Bundle ☐2 "YARA segunda dosis" Bundle ☐ -777 Didn't apply any YARA Bundle→**GO TO 3.3.2.5**
3.3.2.2 In which date did you apply the YARA bundle?	___/____ /2015 ☐-888 DK ☐-999 DA
3.3.2.3 How many kilograms of the YARA bundle did you apply in your plot?	|__|__|__| kg ☐-888 DK ☐-999 DA
3.3.2.4 Did you apply any different fertilizer from the YARA bundle?	☐1 Yes ☐2 No →**GO TO 3.3.2.11**

[FERTILIZANTE]	3.3.2.5 Did you use **[FERTILIZER]** during the second implementation of the 2015 Spring-Summer cycle?	3.3.2.6 How much **[FERTILIZER]** did you apply **per hectare** in the second implementation**?**	3.3.2.7 How did you get it? **CHECK ALL THAT APPLY**	**3.3.2.8** From the **[R. 3.3.2.6]** bulges/kilograms that you applied **[FERTILIZER],** how many bulges/kilograms did you obtain for the second implementation via?	3.3.2.9 What was the total **per hectare** cost of **[FERTILIZER]**	3.3.2.10 Brand of **[FERTILIZER]** 1 Agrogen 2 Yara 3 ADM 4 FYPA 5 Other (Specify) -888 DK -999 DA
A) Urea or White	☐ 1. Yes ☐2. No →**GO NEXT FERT.** ☐-888 DK ☐-999 DA	|__|__|__|__| ☐ 1. Kg ☐ 2. 25 kg Bulge ☐ 3. 50 kg Bulge	☐ 1 Purchased from distributor at normal price	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 2 Government's subsidized price purchase	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 3 Government fertilizers delivery	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 4 Other_____	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
B) DAP or Black	☐ 1. Yes ☐2. No →**GO NEXT FERT.** ☐-888 DK ☐-999 DA	|__|__|__|__| ☐ 1 Kg ☐ 2 25 kg Bulge ☐ 3 50 kg Bulge	☐ 1. Purchased from distributor at normal price	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 2. Government's subsidized price purchase	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 3. Government fertilizers delivery	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 4 Other_____	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
C) KCL or Red	☐ 1. Yes ☐2. No →**GO NEXT FERT.** ☐-888 DK ☐-999 DA	|__|__|__|__| ☐ 1 Kg ☐ 2 25 kg Bulge ☐ 3 50 kg Bulge	☐ 1. Purchased from distributor at normal price	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 2. Government's subsidized price purchase	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 3. Government fertilizers delivery	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 4 Other_____	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
D) Triple super-phosphate	☐ 1. Yes ☐2. No →**GO NEXT FERT.** ☐-888 DK ☐-999 DA	|__|__|__|__| ☐ 1 Kg ☐ 2 25 kg Bulge ☐ 3 50 kg Bulge	☐ 1. Purchased from distributor at normal price	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 2. Government's subsidized price purchase	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 3. Government fertilizers delivery	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 4 Other_____	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
E) Ammonium sulfate	☐ 1. Yes ☐2. No →**GO NEXT FERT.** ☐-888 DK	|__|__|__|__| ☐ 1 Kg ☐ 2 25 kg Bulge	☐ 1. Purchased from distributor at normal price	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 2. Government's subsidized price purchase	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|

	☐-999 DA	☐ 3 50 kg Bulge	☐ 3. Government fertilizers delivery	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 4 Other_____	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
F) Other _____ (See catalogue)	☐ 1. Yes ☐2. No →**GO TO 3.3.2.11** ☐-888 DK ☐-999 DA	|__|__|__|__| ☐ 1 Kg ☐ 2 25 kg Bulge ☐ 3 50 kg Bulge	☐ 1. Purchased from distributor at normal price	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 2. Government's subsidized price purchase	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 3. Government fertilizers delivery	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|
			☐ 4 Other_____	|__|__|__|__| ☐ 1 kg/ha ☐ 2 25kg B ☐ 3 50kg B	|__|__|__|__| $	|__|

3.3.2.11 How much did you spend in the fertilizer transportation from the place of purchase to your plot?	|__|__|__|__|__|__| $	☐-888 DK	☐-999 DA	
3.3.2.12 The implementation was manual or mechanical?	☐ 1 Manual →**GO TO 3.3.2.14**	☐ 2 Mechanical	☐ 3 Both	
3.3.2.13 What was the **per hectare** cost of the fertilization machinery?	|__|__|__|__|__|__| $/ha	☐-888 DK	☐-999 DA	
3.3.2.14 Did you cover the fertilizer after the implementation?	☐ 1. Yes	☐ 2 No	☐ -888 DK	☐ -999 DA

3.4. Herbicides

ENUMERATOR REMEMBER TO ASK THE NEXT QUESTIONS FOR THE PLOT

3.4.1 Did the technician recommend to apply herbicides?	3.4.2 Did you apply herbicides in the plot in the 2015 Spring-Summer cycle?	3.4.3 Why **DIDN'T** you apply herbicides? **LISTEN AND CHECK ALL THAT APPLY -> GO TO S.3.5**	3.4.4 Why **DID** you apply herbicides? **LISTEN AND CHECK ALL THAT APPLY**	3.4.5 What differences did you notice in your plot due to the use of herbicides?
☐1 Yes ☐2 No ☐ -777 Didn't have a technician ☐ -888 DK ☐ -999 DA	☐1 Yes **-> GO TO 3.4.4** ☐2 No ☐ -888 DK ☐ -999 DA	☐1 Because he/she thinks they are harmful to the soil ☐2 Because he/she thinks they are harmful to the crop ☐3 Because he/she didn't have money ☐4 Because the herbicides seemed too expensive ☐5 Because he/she doesn't trust in herbicides ☐6 Because he/she pulled out the weeds manually ☐7 Because he/she didn't have time to apply it ☐8 Other _____.	☐1Because the technician convinced he/she of the importance of doing it ☐2 Because he/she always use them ☐3 Because he/she wanted to try it ☐4 Because weed competes with the plant ☐5 Because is cheaper than doing it manually ☐6 To increase productivity ☐7 Because weed consumes the fertilizer ☐8 Other _____	☐1 The plant laid down ☐2 Leaves turned yellow ☐3 Decreased the amount of weed ☐4 Other_____ ☐5 None

3.4.6 How many times did you apply herbicides in your plot?	3.4.7 Implementation	3.4.8 In which date did you apply the herbicide?	3.4.9 Which herbicide did you apply? **SEE CATALOGUE**	3.4.10 How much did you apply **per hectare?**	3.4.11 Unit	3.4.12 How much did the purchase of the herbicides cost **per hectare**?	3.4.13 How much did the water transportation and the workforce for this implication cost?
|__|__|__| times ☐ -888 DK ☐ -999 DA	1st implementation	|__/__/2015 ☐ -888 DK ☐ -999 DA	|__|__| ☐ -888 DK ☐ -999 DA	|__|__|__|☐ -888 DK ☐ -999 DA	☐1. Kg ☐2. Lt. ☐3. bundle	|__|__|__|$ ☐ -888 DK ☐ -999 DA	|__|__|__|$ ☐ -888 DK ☐ -999 DA
			|__|__| ☐ -888 DK ☐ -999 DA	|__|__|__|☐ -888 DK ☐ -999 DA	☐1. Kg ☐2. Lt. ☐3. bundle	|__|__|__|$ ☐ -888 DK ☐ -999 DA	
	2nd implementation	|__/__/2015 ☐ -888 DK ☐ -999 DA	|__|__| ☐ -888 DK ☐ -999 DA	|__|__|__|☐ -888 DK ☐ -999 DA	☐1. Kg ☐2. Lt. ☐3. bundle	|__|__|__|$ ☐ -888 DK ☐ -999 DA	|__|__|__|$ ☐ -888 DK ☐ -999 DA
			|__|__| ☐ -888 DK ☐ -999 DA	|__|__|__|☐ -888 DK ☐ -999 DA	☐1. Kg ☐2. Lt. ☐3. bundle	|__|__|__|$ ☐ -888 DK ☐ -999 DA	
	3rd implementation	|__/__/2015 ☐ -888 DK ☐ -999 DA	|__|__| ☐ -888 DK ☐ -999 DA	|__|__|__|☐ -888 DK ☐ -999 DA	☐1. Kg ☐2. Lt. ☐3. bundle	|__|__|__|$ ☐ -888 DK ☐ -999 DA	|__|__|__|$ ☐ -888 DK ☐ -999 DA
			|__|__| ☐ -888 DK ☐ -999 DA	|__|__|__|☐ -888 DK ☐ -999 DA	☐1. Kg ☐2. Lt. ☐3. bundle	|__|__|__|$ ☐ -888 DK ☐ -999 DA	

3.5. Pesticides

ENUMERATOR REMEMBER TO ASK THE NEXT QUESTIONS FOR THE PLOT

3.5.1 Did the technician recommend to apply pesticides?	3.5.2 Did you apply pesticides in the hectare in the 2015 Spring-Summer cycle?	3.5.3 Why **DIDN'T** you apply pesticides? **LISTEN AND CHECK ALL THAT APPLY-> GO TO S.3.6**	3.5.4 Why **DID** you apply pesticides? **ENUMERATOR LISTEN AND CHECK ALL THAT APPLY**	3.5.5 What differences did you notice in your plot due to the use of pesticides?
☐1 Yes ☐2 No ☐ -777 Didn't have a technician ☐ -888 DK ☐ -999 DA	☐1 Yes → **GO TO 3.5.4** ☐2 No ☐ -888 DK ☐ -999 DA	☐1 He/she thinks they are harmful to the soil ☐2 He/she thinks they are harmful to the crop ☐3 He/she didn't have money ☐4 The pesticides seemed too expensive ☐5 He/she doesn't trust in pesticides ☐6 He/she didn't have time to apply it ☐7 He/she didn't witness any plague ☐8 Other _____.	☐1 Because the technician convinced he/she of the importance of doing it ☐2 Because he/she always use them ☐3 Because he/she wanted to try it ☐4 Because he/she had problems with insects ☐5 Because he/she had problems with moles ☐6 To increase productivity ☐7 Other _____	☐1 The plant laid down ☐2 Leaves turned yellow ☐3 Leaves rolled up ☐4 Decreased the amount of plague ☐5 Less damaged leaves ☐6 Increased the amount of leaves ☐7 Other_____ ☐8 None

3.5.6 How many times did you apply pesticides in the hectare?	3.5.7 Implementation	3.5.8 In which date did you apply the pesticide?	3.5.9 Which pesticide did you apply? **SEE CATALOGUE**	3.5.10 How much did you apply **per hectare?**	3.5.11 Unit	3.5.12 How much did the purchase of the pesticides cost **per hectare**?	3.5.13 How much did the water transportation and the workforce for this implication cost?
|_____| times ☐ -888 DK ☐ -999 DA	1st implementation	|__/__/2015 ☐ -888 DK ☐ -999 DA	|__|__| ☐ -888 DK ☐ -999 DA	|__|__|__|☐ -888 DK ☐ -999 DA	☐1. Kg ☐2. Lt. ☐3. bundle	|__|__|__|$ ☐ -888 DK ☐ -999 DA	|__|__|__|$ ☐ -888 DK ☐ -999 DA
			|__|__| ☐ -888 DK ☐ -999 DA	|__|__|__|☐ -888 DK ☐ -999 DA	☐1. Kg ☐2. Lt. ☐3. bundle	|__|__|__|$ ☐ -888 DK ☐ -999 DA	
	2nd implementation	|__/__/2015 ☐ -888 DK ☐ -999 DA	|__|__| ☐ -888 DK ☐ -999 DA	|__|__|__|☐ -888 DK ☐ -999 DA	☐1. Kg ☐2. Lt. ☐3. bundle	|__|__|__|$ ☐ -888 DK ☐ -999 DA	|__|__|__|$ ☐ -888 DK ☐ -999 DA
			|__|__| ☐ -888 DK ☐ -999 DA	|__|__|__|☐ -888 DK ☐ -999 DA	☐1. Kg ☐2. Lt. ☐3. bundle	|__|__|__|$ ☐ -888 DK ☐ -999 DA	
	3rd implementation	|__/__/2015 ☐ -888 DK ☐ -999 DA	|__|__| ☐ -888 DK ☐ -999 DA	|__|__|__|☐ -888 DK ☐ -999 DA	☐1. Kg ☐2. Lt. ☐3. bundle	|__|__|__|$ ☐ -888 DK ☐ -999 DA	|__|__|__|$ ☐ -888 DK ☐ -999 DA
			|__|__| ☐ -888 DK ☐ -999 DA	|__|__|__|☐ -888 DK ☐ -999 DA	☐1. Kg ☐2. Lt. ☐3. bundle	|__|__|__|$ ☐ -888 DK ☐ -999 DA	

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3.6. Foliar fertilizers

ENUMERATOR REMEMBER TO ASK THE NEXT QUESTIONS FOR THE PLOT

3.6.1 Did the technician recommend to apply foliar fertilizers?	3.6.2 Did you apply foliar fertilizers in the hectare in the 2015 Spring-Summer cycle?	3.6.3 Why **DIDN'T** you apply foliar fertilizers? **LISTEN AND CHECK ALL THAT APPLY→ GO TO S.3.7**	3.6.4 Why **DID** you apply foliar fertilizers? **LISTEN AND CHECK ALL THAT APPLY**	3.6.5 What differences did you notice in your plot due to the use of foliar fertilizers?
☐1 Yes ☐2 No ☐ -777 Didn't have a technician ☐ -888 DK ☐ -999 DA	☐1 Yes **-> GO TO 3.6.4** ☐2 No ☐ -888 DK ☐ -999 DA	☐1 He/she thinks they are harmful to the soil ☐2 He/she thinks they are harmful to the crop ☐3 He/she didn't have money ☐4 The foliar fertilizer seemed too expensive ☐5 He/she doesn't trust in foliar fertilizers ☐6 He/she didn't have time to apply it ☐7 He/she didn't have any deficiency ☐8 Other _____.	☐1 Because the technician convinced he/she of the importance of doing it ☐2 Because he/she always use them ☐3 Because he/she wanted to try it ☐4 Because he/she had deficiencies with micronutrients ☐5 Because he/she had deficiencies with macronutrients ☐6 To increase productivity ☐7 Other _____	☐1 Plant is taller ☐2 Stalk of the plant is thicker ☐3 Leaf of the plant is thicker ☐4 Other_____ ☐5 None

3.6.6 How many times did you apply foliar fertilizers in the hectare?	3.6.7 Implementation	3.6.8 In which date did you apply the foliar fertilizer?	3.6.9 Which foliar fertilizer did you apply? **SEE CATALOGUE**	3.6.10 How much did you apply **per hectare**?	3.6.11 Unit	3.6.12 How much did the purchase of the foliar fertilizer cost **per hectare**?	3.6.13 How much did the water transportation and the workforce for this implication cost?
|_____| times ☐-888 DK ☐-999 DA	1st implementation	__/__/2015 ☐-888 DK ☐-999 DA	|___| ☐-888 DK ☐-999 DA	|_____| ☐-888 DK ☐-999 DA	☐1 Kg ☐2 Lt. ☐3 bundle	|__|__|__|$ ☐-888 DK ☐-999 DA	|__|__|__|$ ☐-888 DK ☐-999 DA
		__/__/2015 ☐-888 DK ☐-999 DA	|___| ☐-888 DK ☐-999 DA	|_____| ☐-888 DK ☐-999 DA	☐1 Kg ☐2 Lt. ☐3 bundle	|__|__|__|$ ☐-888 DK ☐-999 DA	
	2nd implementation	__/__/2015 ☐-888 DK ☐-999 DA	|___| ☐-888 DK ☐-999 DA	|_____| ☐-888 DK ☐-999 DA	☐1 Kg ☐2 Lt. ☐3 bundle	|__|__|__|$ ☐-888 DK ☐-999 DA	|__|__|__|$ ☐-888 DK ☐-999 DA
		__/__/2015 ☐-888 DK ☐-999 DA	|___| ☐-888 DK ☐-999 DA	|_____| ☐-888 DK ☐-999 DA	☐1 Kg ☐2 Lt. ☐3 bundle	|__|__|__|$ ☐-888 DK ☐-999 DA	
	3rd implementation	__/__/2015 ☐-888 DK ☐-999 DA	|___| ☐-888 DK ☐-999 DA	|_____| ☐-888 DK ☐-999 DA	☐1 Kg ☐2 Lt. ☐3 bundle	|__|__|__|$ ☐-888 DK ☐-999 DA	|__|__|__|$ ☐-888 DK ☐-999 DA
		__/__/2015 ☐-888 DK ☐-999 DA	|___| ☐-888 DK ☐-999 DA	|_____| ☐-888 DK ☐-999 DA	☐1 Kg ☐2 Lt. ☐3 bundle	|__|__|__|$ ☐-888 DK ☐-999 DA	

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3.7. Labor

ENUMERATOR READ: Now I will ask you to think about all the tasks you did in your **test hectare** of the plot **[TREATMENT PLOT]** _____ in the 2015 Spring-Summer cycle and tell me how much time and labor it took to perform them.

3.7.1 Including yourself, how many people worked in the tasks related to soil preparation?	3.7.2 Including yourself, how many people worked in the tasks related to sowing?	3.7.3 Including yourself, how many people worked in the tasks related to the first hoeing?	3.7.4 Including yourself, how many people worked in the tasks related to the second hoeing?	3.7.5 Including yourself, how many people worked in the implementation of insecticides, herbicides or foliar fertilizers?	**3.7.6** Including yourself, how many people worked in the tasks related to weeding?	**3.7.7 REGISTER THE TOTAL NUMBER OF WORKERS (ADD 3.7.1 to 3.7.6)** **THIS TOTAL MUST MATCH THE NUMBER OF ACTIVITIES CHECKED IN QUESTION 3.7.8**
	|__|__|	|__|__|	|__|__|	|__|__|		|__|__|

NAME	3.7.8 Is **[NAME]** a relative or a day laborer?	3.7.9 In which stages of the process did the worker **[NAME]** participated? **[ACTIVITY]**	3.7.10 How many days did this person work during the **[ACTIVITY/IES]** ?	3.7.11 What was the average per day payment for **[NAME]**? **ENTER -666 IF THE PAYMENT WAS INCLUDED IN THE MACHINERY RENTAL - 777 IF DIDN'T PAY HIM/HER**
PRODUCER		☐ 1. Soil preparation	|__|__|	|__|__|__|$
		☐ 2. Sowing	|__|__|	|__|__|__|$
		☐ 3. First hoeing	|__|__|	|__|__|__|$
		☐ 4. Second hoeing	|__|__|	|__|__|__|$
		☐ 5. Implementation of insecticides, herbicides or foliar fertilizers	|__|__|	|__|__|__|$
		☐ 6. Weeding	|__|__|	|__|__|__|$
WORKER 1 _____	☐ 1. Relative ☐ 2. Unrelated worker	☐ 1. Soil preparation	|__|__|	|__|__|__|$
		☐ 2. Sowing	|__|__|	|__|__|__|$
		☐ 3. First hoeing	|__|__|	|__|__|__|$
		☐ 4. Second hoeing	|__|__|	|__|__|__|$
		☐ 5. Implementation of insecticides, herbicides or foliar fertilizers	|__|__|	|__|__|__|$
		☐ 6. Weeding	|__|__|	|__|__|__|$
WORKER 2 _____	☐ 1. Relative ☐ 2. Unrelated worker	☐ 1. Soil preparation	|__|__|	|__|__|__|$
		☐ 2. Sowing	|__|__|	|__|__|__|$
		☐ 3. First hoeing	|__|__|	|__|__|__|$
		☐ 4. Second hoeing	|__|__|	|__|__|__|$
		☐ 5. Implementation of insecticides, herbicides or foliar fertilizers	|__|__|	|__|__|__|$
		☐ 6. Weeding	|__|__|	|__|__|__|$
WORKER 3 _____	☐ 1. Relative ☐ 2. Unrelated worker	☐ 1. Soil preparation	|__|__|	|__|__|__|$
		☐ 2. Sowing	|__|__|	|__|__|__|$
		☐ 3. First hoeing	|__|__|	|__|__|__|$
		☐ 4. Second hoeing	|__|__|	|__|__|__|$
		☐ 5. Implementation of insecticides, herbicides or foliar fertilizers	|__|__|	|__|__|__|$
		☐ 6. Weeding	|__|__|	|__|__|__|$
WORKER 4 _____	☐ 1. Relative ☐ 2. Unrelated worker	☐ 1. Soil preparation	|__|__|	|__|__|__|$
		☐ 2. Sowing	|__|__|	|__|__|__|$

NAME	3.7.8 Is **[NAME]** a relative or a day laborer?	3.7.9 In which stages of the process did the worker **[NAME]** participated? **[ACTIVITY]**	3.7.10 How many days did this person work during the **[ACTIVITY/IES]** ?	3.7.11 What was the average per day payment for **[NAME]**? **ENTER -666 IF THE PAYMENT WAS INCLUDED IN THE MACHINERY RENTAL - 777 IF DIDN'T PAY HIM/HER**
		☐ 3. First hoeing	|__|__|	|__|__|__|$
		☐ 4. Second hoeing	|__|__|	|__|__|__|$
		☐ 5. Implementation of insecticides, herbicides or foliar fertilizers	|__|__|	|__|__|__|$
		☐ 6. Weeding	|__|__|	|__|__|__|$
WORKER 5 _____	☐ 1. Relative ☐ 2. Unrelated worker	☐ 1. Soil preparation	|__|__|	|__|__|__|$
		☐ 2. Sowing	|__|__|	|__|__|__|$
		☐ 3. First hoeing	|__|__|	|__|__|__|$
		☐ 4. Second hoeing	|__|__|	|__|__|__|$
		☐ 5. Implementation of insecticides, herbicides or foliar fertilizers	|__|__|	|__|__|__|$
		☐ 6. Weeding	|__|__|	|__|__|__|$
WORKER 6 _____	☐ 1. Relative ☐ 2. Unrelated worker	☐ 1. Soil preparation	|__|__|	|__|__|__|$
		☐ 2. Sowing	|__|__|	|__|__|__|$
		☐ 3. First hoeing	|__|__|	|__|__|__|$
		☐ 4. Second hoeing	|__|__|	|__|__|__|$
		☐ 5. Implementation of insecticides, herbicides or foliar fertilizers	|__|__|	|__|__|__|$
		☐ 6. Weeding	|__|__|	|__|__|__|$
WORKER 7 _____	☐ 1. Relative ☐ 2. Unrelated worker	☐ 1. Soil preparation	|__|__|	|__|__|__|$
		☐ 2. Sowing	|__|__|	|__|__|__|$
		☐ 3. First hoeing	|__|__|	|__|__|__|$
		☐ 4. Second hoeing	|__|__|	|__|__|__|$
		☐ 5. Implementation of insecticides, herbicides or foliar fertilizers	|__|__|	|__|__|__|$
		☐ 6. Weeding	|__|__|	|__|__|__|$
WORKER 8 _____	☐ 1. Relative ☐ 2. Unrelated worker	☐ 1. Soil preparation	|__|__|	|__|__|__|$
		☐ 2. Sowing	|__|__|	|__|__|__|$
		☐ 3. First hoeing	|__|__|	|__|__|__|$
		☐ 4. Second hoeing	|__|__|	|__|__|__|$
		☐ 5. Implementation of insecticides, herbicides or foliar fertilizers	|__|__|	|__|__|__|$
		☐ 6. Weeding	|__|__|	|__|__|__|$
WORKER 9 _____	☐ 1. Relative ☐ 2. Unrelated worker	☐ 1. Soil preparation	|__|__|	|__|__|__|$
		☐ 2. Sowing	|__|__|	|__|__|__|$
		☐ 3. First hoeing	|__|__|	|__|__|__|$
		☐ 4. Second hoeing	|__|__|	|__|__|__|$
		☐ 5. Implementation of insecticides, herbicides or foliar fertilizers	|__|__|	|__|__|__|$
		☐ 6. Weeding	|__|__|	|__|__|__|$

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Disasters

ENUMERATOR READ: I will now ask you about disasters that the **test hectare** of your plot _____ suffered in the 2015 Spring-Summer cycle

3.8.1 Did your plot suffer any disaster after sowing in 2015?	3.8.2 Which disaster did it suffer? **LISTEN AND CHECK ALL THAT APPLY**	3.8.3 How many times did the disaster happen?	3.8.4 In which dates did the disaster happen? Start date	3.8.5 In which dates did the disaster happen? Finish date	3.8.6 Affectation percentage
☐ 1 Yes ☐ 2 No → **Go to 8.4.1**	☐1 Hail ☐2 Drought ☐3 Flood ☐4 Frost ☐5 Fire ☐6 Root lodging ☐7 Other: _____	☐1 Hail: |__|times ☐2 Drought: |__|times ☐3 Flood: |__|times ☐4 Frost: |__|times ☐5 Fire: |__|times ☐6 Root lodging: |__|times ☐7 Other: |__|times	☐1 Hail from: |__|__/|__|__|/2015 ☐2 Drought from: |__|__/|__|__|/2015 ☐3 Flood from: |__|__/|__|__|/2015 ☐4 Frost from: |__|__/|__|__|/2015 ☐5 Fire from: |__|__/|__|__|/2015 ☐6 Root lodging from: |__|__/|__|__|/2015 ☐7 Other from: |__|__/|__|__|/2015	☐1 Hail until: |__|__/|__|__|/2015 ☐2 Drought until: |__|__/|__|__|/2015 ☐3 Flood until: |__|__/|__|__|/2015 ☐4 Frost until: |__|__/|__|__|/2015 ☐5 Fire until: |__|__/|__|__|/2015 ☐6 Root lodging until: |__|__/|__|__|/2015 ☐7 Other until: |__|__/|__|__|/2015	☐1 Hail |__|__|__| ☐2 Drought: |__|__|__| ☐3 Flood: |__|__|__| ☐4 Frost: |__|__|__| ☐5 Fire: |__|__|__| ☐6 Root lodging: |__|__|__| ☐7 Other: |__|__|__|
			3.8.7 **Disaster second time** in which dates did the disaster happen? Start date	3.8.8 **Disaster second time** in which dates did the disaster happen? Finish date	3.8.9 **Disaster second time** Affectation percentage
			☐1 Hail del: |__|__/|__|__|/2015 ☐2 Drought del: |__|__/|__|__|/2015 ☐3 Flood del: |__|__/|__|__|/2015 ☐4 Frost del: |__|__/|__|__|/2015 ☐5 Fire del: |__|__/|__|__|/2015 ☐6 Root lodging de: |__|__/|__|__|/2015 ☐7 Other from: |__|__/|__|__|/2015	☐1 Hail until: |__|__/|__|__|/2015 ☐2 Drought until: |__|__/|__|__|/2015 ☐3 Flood until: |__|__/|__|__|/2015 ☐4 Frost until: |__|__/|__|__|/2015 ☐5 Fire until: |__|__/|__|__|/2015 ☐6 Root lodging until: |__|__/|__|__|/2015 ☐7 Other until: |__|__/|__|__|/2015	☐1 Hail |__|__|__| ☐2 Drought: |__|__|__| ☐3 Flood: |__|__|__| ☐4 Frost: |__|__|__| ☐5 Fire: |__|__|__| ☐6 Root lodging: |__|__|__| ☐7 Other: |__|__|__|

4. AGRICULTURAL TECHNOLOGIES

ENUMERATOR READ: From now, I will ask you about your practices, not only in your plot **[TREATMENT PLOT]** **but in all your plots.**

4.1 Soil analysis

4.1.1 In the 2015 Spring-Summer cycle, did you perform soil analysis?	4.1.2 What was the soil analysis cost?	4.1.3 When did you receive the results?	4.1.4 Who performed the soil analysis?	4.1.5 What type of soil analysis/recommendations did you receive from QFD?	4.1.6 Do you remember the formula of your recommendations for sowing?	4.1.7 What was the formula of your recommendations for sowing? (**kilograms**)
☐1. Yes ☐2. No → **GO TO S.4.2**	|__|__|__|__|$ ☐-888 DK ☐-999 DA	|__|__/|__|__|/2015 ☐-777 Didn't receive results →**GO TO S.4.2**	☐1. QFD ☐2. Other_____ ☐-888 DK ☐-999 DA	☐1 Personalized/from your plot ☐ 2 Locality average ☐-888 DK ☐-999 DA	☐1. Yes ☐2. No → **GO TO 4.1.8**	1.Urea: |__|__|__|kg 2.DAP: |__|__|__|kg 3.KCL: |__|__|__|kg 4.Micro :|__|__|__|kg 5. Other: |__|__|__|kg (Specify)_____

4.1.8 Thanks to the information they provided you, did you perform any different practice in relation to the past 3 years?	4.1.9 What did you perform differently? **LISTEN AND CHECK ALL THAT APPLY**	4.1.10 Did you follow the recommendations delivered from the soil analysis?
☐ 1 Yes ☐ 2 No →**GO TO 4.1.10** ☐-888 DK ☐-999 DA	☐1 Apply fertilizers (NPK) to sowing ☐2 Apply microelements (Zinc, Boron, Magnesium) to sowing ☐3 To use precision seed drill ☐4 To do more fertilizer implementations ☐5 To use herbicides ☐6 To use pesticides ☐7 To use foliar fertilizers ☐8 Other_____ ☐-888 DK ☐-999 DA	☐1 All ☐2 Almost all ☐3 Some ☐4 Few ☐5 None ☐-777 I didn't receive any recommendation ☐-888 DK ☐-999 DA

4.2 Technical assistance

4.2.1 Did you have a technician or engineer that helped you with your crops follow-up in the 2015 Spring-Summer cycle?	4.2.2 Why **Didn't you** have a technician/engineer? → **CONTROL GO TO 4.2.10** **LISTEN AND CHECK ALL THAT APPLY** **IF THE PRODUCER IS T4 GO TO 4.2.10**	4.2.3 Why **Did you** have a technician/engineer? **LISTEN AND CHECK ALL THAT APPLY**	4.2.4 What is the name of your technician/engineer?	4.2.5 How many times does your technician/engineer has visited your plot in the 2015 Spring-Summer cycle?	4.2.6 Was the technician/engineer present during sowing?
☐1. Yes → **Go to 4.2.3** ☐ 2. No ☐-888 DK ☐-999 DA	☐1. Because he/she didn't know they existed ☐2. Because he/she doesn't have money ☐3. Because he/she has always work this way ☐4. Because he/she doesn't see the benefit ☐5. There are no places to hire technicians ☐6. He/she doesn't trust technicians ☐7. Other: _____ ☐-888 DK ☐-999 DA	☐1. It's part of the PIAFEM program from QFD ☐2. From the government ☐3. Because I trust in the technicians' work ☐4. Because a relative is an agronomical engineer ☐5. Other producers recommended to me ☐6. Because he/she advises/helps/guides with the crops ☐7. Other: _____ ☐-888 DK ☐-999 DA	|__|__|__|__|__|__|__|__|_ |__|__|__|__|__|__|__|__|_ |__|__|__|__|__|__|__|__|_ |__|__|__|__|__|__|__|__|_ |__|__|__|__|__|__|__|__|_ ☐-888 DK ☐-999 DA	|__|__| times ☐-888 DK ☐-999 DA	☐ 1 Yes ☐ 2 No ☐-888 DK ☐-999 DA

4.2.7 Was the technician/engineer present during the first fertilization after sowing?	4.2.8 In a scale from 1 to 10, where 1 is a very poor work and 10 is an excellent work, how would you grade your technician's/engineer's work in this cycle?	4.2.9 How much did he/she charge you per year?	4.2.10 To how many training courses was you invited to?	4.2.11 To how many training courses did you attend?	4.2.12 What subjects were addressed in each training course? **ASK THE SUBJECTS OF EACH COURSE THAT THE PRODUCER ATTENDED**			4.2.13 From 1 to 10, where 1 is useless and 10 is very useful, how would you grade the information from the training courses?
☐1Yes ☐ 2 No ☐-888 DK ☐-999 DA	|__|__| ☐-888 DK ☐-999 DA	|__|__|__|__|$ ☐-777 QFD/government pays it ☐-888 DK ☐-999 DA	|__|__| courses ☐-888 DK ☐-999 DA	|__|__| courses ☐-888 DK ☐-999 DA **IF HE SHE DIDN'T ATTEND TO ANY COURSE →GO TO S.4.3**	1	☐1 Soil preparation ☐2 Fertilization during sowing ☐3 Use of precision machinery ☐4 Fertilization after sowing ☐5 Weeds control	☐6 Identification and correction of deficiencies ☐7 Plagues control ☐8 Soil preparation for 2016 ☐9 Seed selection for 2016 ☐10 Other: (specify)_____	|__|__| ☐-888 DK ☐-999 DA
					2	☐1 Soil preparation ☐2 Fertilization during sowing ☐3 Use of precision machinery ☐4 Fertilization after sowing ☐5 Weeds control	☐6 Identification and correction of deficiencies ☐7 Plagues control ☐8 Soil preparation for 2016 ☐9 Seed selection for 2016 ☐10 Other: (specify)_____	|__|__| ☐-888 DK ☐-999 DA
					3	☐1 Soil preparation ☐2 Fertilization during sowing ☐3 Use of precision machinery ☐4 Fertilization after sowing ☐5 Weeds control	☐6 Identification and correction of deficiencies ☐7 Plagues control ☐8 Soil preparation for 2016 ☐9 Seed selection for 2016 ☐10 Other: (specify)_____	|__|__| ☐-888 DK ☐-999 DA

4.3 Recommended Machinery

4.3.1 Did you sow maize with precision machinery as the program recommended? Meaning to sow in row and fertilize at the same time	4.3.2 Why did you decide **NOT** to sow with the precision machinery? **LISTEN AND CHECK ALL THAT APPLY**	4.3.3 Why **DID** you decide to sow with this precision machinery? **LISTEN AND CHECK ALL THAT APPLY**	4.3.4 What differences did you notice in sowing for the use of precision machinery?	4.3.5 Did you have any problem using the recommended precision machinery? **LISTEN AND CHECK ALL THAT APPLY**	4.3.6 From 1 to 10, where 1 is useless and 10 is very useful, how would you grade the precision machinery usage?
☐1. Yes → **GO TO 4.3.3** ☐ 2. No ☐-888 DK ☐-999 DA	☐1 **DIDN'T** come out with the seed drill from the program ☐2 Has already used it and **DIDN'T** see any results ☐3 Is very hard to get the machinery in the town ☐4 Plot's conditions didn't allow to use machinery ☐5 Didn't have money to rent it ☐6 Rent seems too expensive ☐7 Didn't agree with the proposed date ☐8 Other (specify) _____ ☐-888 DK ☐-999 DA → **GO TO 4.4**	☐1 Because I did come out with the seed drill from the program ☐2 Because I have already used it and saw results ☐3 Because the technician convinced me of the importance of sowing with machinery ☐4 Because is the first time that I sow with machinery and want to see the results ☐5 Because is the one I always use ☐6 Other (specify) _____ ☐-888 DK ☐-999 DA	☐1 Greater amount of seeds ☐2 Greater amount of plants ☐3 More similar/homogeneous growth of the crops ☐4 Distance between plants ☐5 More leveled sowing ☐6 Other (specify) _____ ☐-777 Didn't notice any difference ☐-888 DK ☐-999 DA	☐1 Didn't sow the entire hectare ☐2 Got plugged ☐3 It tightened ☐4 The seed depth wasn't the right one ☐5 The driver was going very fast ☐6 Moisture problems ☐7 Didn't have any problem with the machinery ☐8. Other (specify) _____ ☐-888 DK ☐-999 DA	|__|__| ☐-888 DK ☐-999 DA

4.4 Sowing fertilization and YARA Fertilizers

4.4.1 Did you fertilize the sowing in 2015?	4.4.2 Why did you decide **NOT** to fertilize the sowing? → **GO TO 4.4.6**	4.4.3 Did you fertilize the sowing with the YARA bundle recommended from the soil analysis of this year?	4.4.4 Why did you decide to fertilize the sowing with the YARA bundle recommended from the soil analysis? **LISTEN AND CHECK ALL THAT APPLY** → **GO TO 4.4.6**	4.4.5 Why did you decide **NOT** to fertilize the sowing with the YARA bundle recommended from the soil analysis? **LISTEN AND CHECK ALL THAT APPLY**
☐1. Yes → **GO TO 4.4.3** ☐ 2. No ☐-888 DK ☐-999 DA	☐1. Because he/she didn't have the required machinery ☐2. Because I didn't come out with it from the program ☐3. Because the bundle was expensive ☐4. Because he/she didn't have the money to pay for the bundle ☐5. Because I sowed before the technician indicated me ☐6. Because I received fertilizer from a government program ☐7. Because I didn't trust in the recommendation ☐8. Other (specify) _____ ☐-888 DK ☐-999 DA → **GO TO 4.4.6**	☐1. Yes ☐ 2. No → **GO TO 4.4.5** ☐-888 DK ☐-999 DA	☐1. Because I came out with the bundle from the program ☐ 2. Because I want to follow all the recommendations from the soil analysis ☐ 3. Because I have never fertilized the sowing and I want to see if it works ☐ 4. Other (specify) _____ ☐-888 DK ☐-999 DA	☐1 Because he/she didn't have the required machinery ☐2 Because I didn't come out with it from the program ☐3 Because the bundle was expensive ☐4 Because he/she didn't have the money to pay for the bundle ☐5 Because I sowed before the technician indicated me ☐6 Because I received fertilizer from a government program ☐7 Because I didn't trust in the recommendation ☐8 Other (specify) _____ ☐-888 DK ☐-999 DA

4.4.6 Did you perform the second fertilization with the YARA bundle recommended from the soil analysis?	4.4.7 Why did you decide to apply the second fertilization YARA bundle recommended from the soil analysis? **LISTEN AND CHECK ALL THAT APPLY → GO TO 4.4.9**	4.4.8 Why did you decide **NOT** to apply the second fertilization YARA bundle recommended from the soil analysis? **ENUMERATOR LISTEN AND CHECK ALL THAT APPLY**
☐1. Yes ☐ 2. No **-> GO TO 4.4.8** ☐-888 DK ☐-999 DA	☐1. Because I want to follow all the recommendations from the soil analysis ☐2. Because I didn't have to pay the difference for the recommended bundle ☐3. Because I saw great results from the fertilizer of the sowing ☐4. Due to the recommendation from the technician ☐5. Because they gave me a voucher for Chedraui ☐6. Other (specify) _____ ☐-888 DK ☐-999 DA	☐1. Because I didn't have money ☐2. Because the bundle was expensive ☐3. Because the amount of fertilizer was too little ☐4. Because I was going to spend more in transportation than in the fertilizer ☐5. Because I had already bought another fertilizer ☐6. Because I received fertilizer from a government program ☐7. Because I didn't trust in the recommendation ☐8. Other (specify) _____ ☐-888 DK ☐-999 DA

4.4.9 Did you notice any difference between the YARA fertilizer and the fertilizer that you regularly use?	4.4.10 What differences did you notice between the fertilizers? **LISTEN AND CHECK ALL THAT APPLY**	4. 4. 11 Did you notice any difference in your crops implementing the YARA fertilizer?	4.4.12 What differences did you notice in your crops implementing the YARA fertilizer? **LISTEN AND CHECK ALL THAT APPLY**	4. 4. 13 From 1 to 10, where 1 is the worst quality and 10 is the best quality, how would you grade the YARA fertilizer quality?	4.4.14 From 1 to 10, where 1 is the worst quality and 10 is the best quality, how would you grade the quality of the government's subsidized fertilizer?
☐1. Yes ☐ 2. No → **GO TO 4.4.11** ☐-777 Doesn't know the YARA fertilizer → **GO TO 4.4.14** ☐-888 DK ☐-999 DA	☐1. The Yara was more granulated than the one he/she regularly uses? ☐2. The color was different ☐3. The compaction was different ☐4. The cost ☐5. Other (specify) _____ ☐-888 DK ☐-999 DA	☐1 Yes ☐2 No → **GO TO 4.4.13** ☐-888 DK ☐-999 DA	☐1. The plant's color is more green ☐2. Plant's growth was quicker ☐3. I applied less and saw results ☐4. Deficiency problems decreased ☐5. The plant's color is more yellow ☐6. The seed/plant burned ☐5. Other (specify) _____ ☐-888 DK ☐-999 DA	_____ ☐-888 DK ☐-999 DA	_____ ☐-888 DK ☐-999 DA

4.4.15 Did you receive the commitment/participation reward from QFD?	4.4.16 How much money did the reward for commitment or participation offer?	4.4.17 If you **WOULDN'T** had received the commitment money from QFD, would you had gotten the second fertilization YARA bundle recommended from the soil analysis?
☐1 Yes ☐2 No → **GO TO 4.4.17** ☐-888 DK ☐-999 DA	☐1 100 pesos in Chedraui ☐2 300 pesos in Chedraui ☐-888 DK ☐-999 DA	☐1 Yes ☐2 No ☐-888 DK ☐-999 DA