



PRIME

# **PRE-SEMESTER BULLETIN**

December 2020

**REGION III - CENTRAL LUZON**

# Common pests and rice varieties planted in the region

TABLE 1. Commonly observed pests in the region for the 1st semesters of 2019 and 2020.

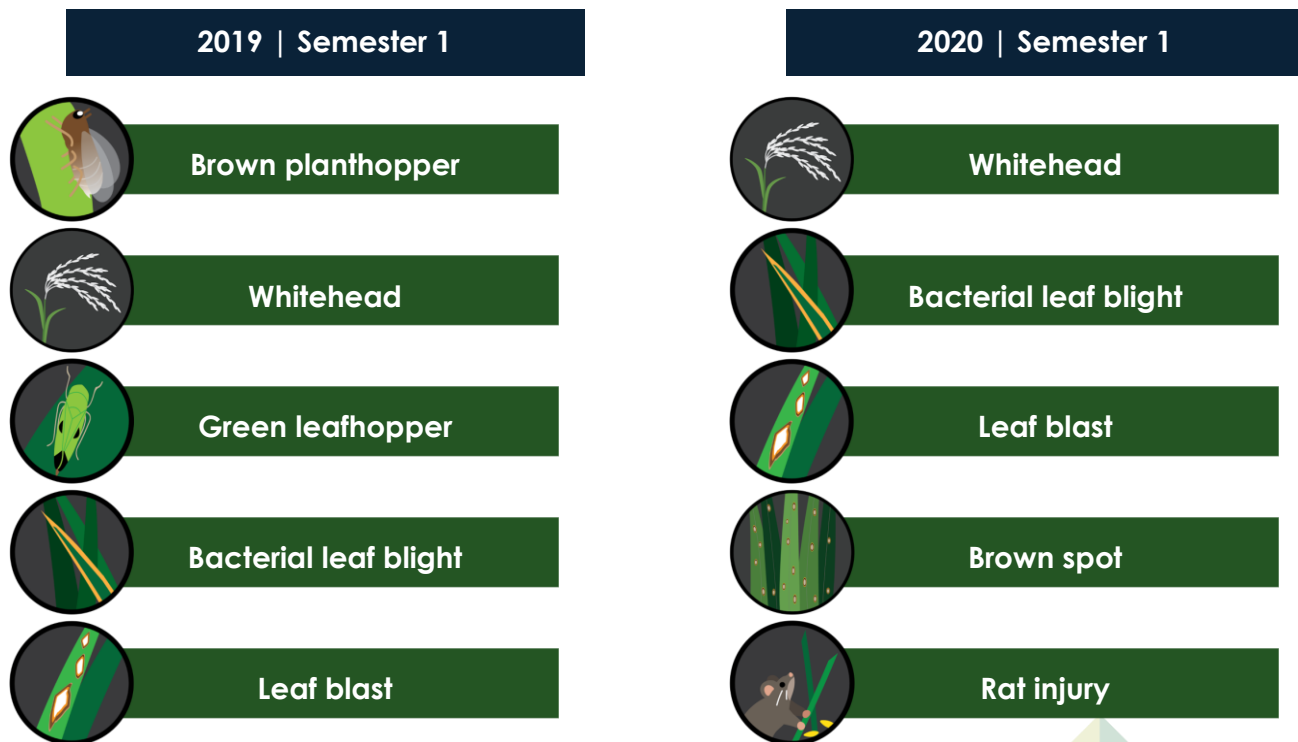
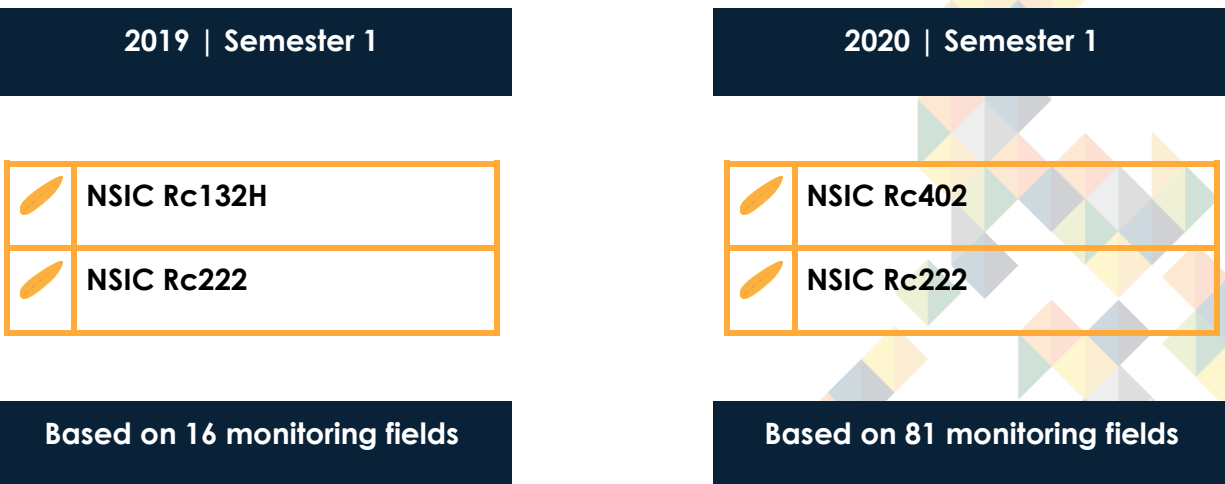


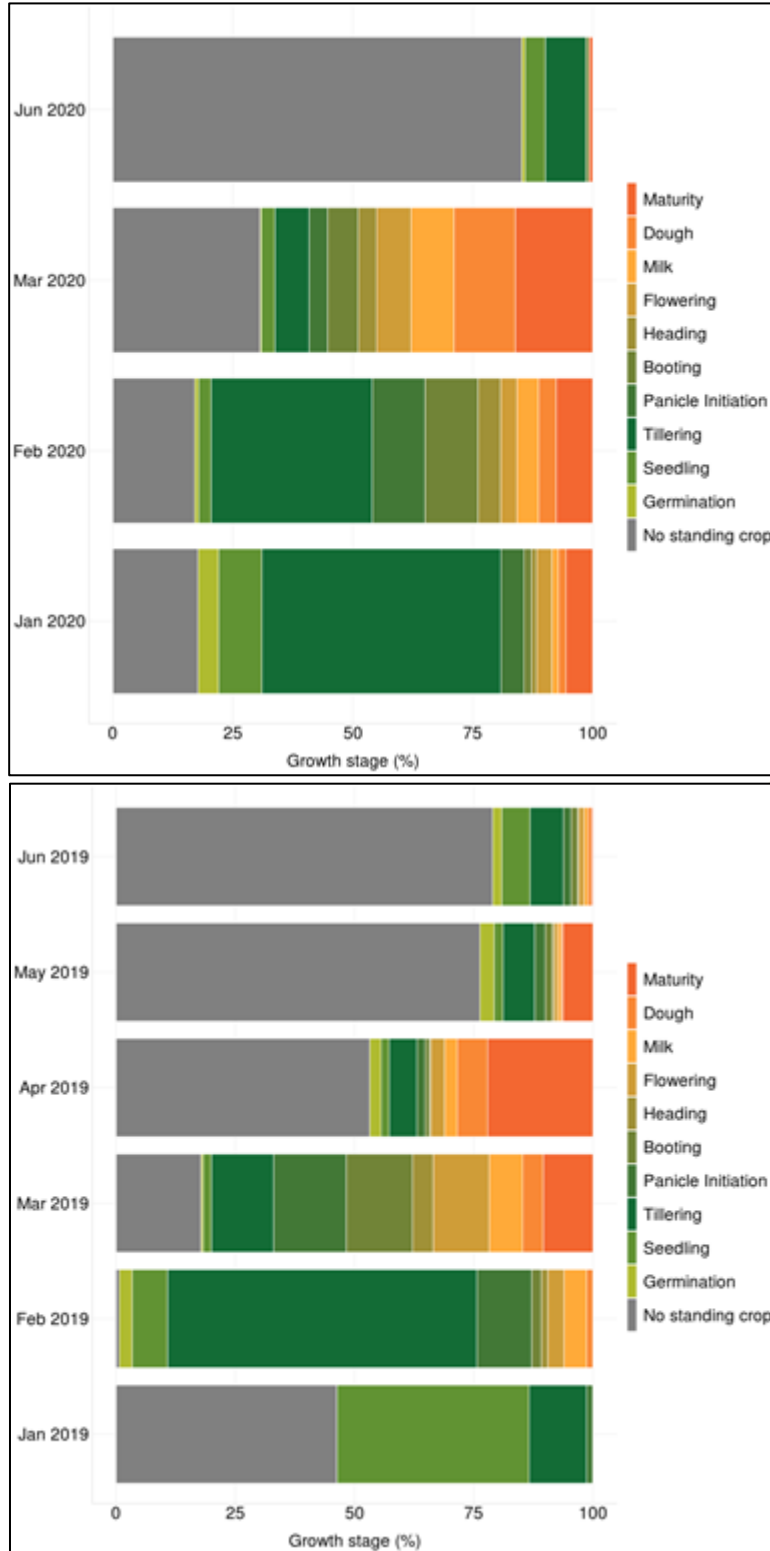
TABLE 2. Commonly planted varieties in the region for the 1st semesters of 2019 and 2020.



Disclaimer: All the data presented in this report are based on the monthly monitoring of farmers' fields by regional data collectors of PRIME.

# Growth stages

FIGURE 1. Percentage of crop growth stage of fields by month.



Disclaimer: All the data presented in this report are based on the monthly monitoring of farmers' fields by regional data collectors of PRIME.

# Monitored fields and data collectors

## Municipalities surveyed

**Nueva Ecija:** Guimba, Rizal, and San Antonio

**Pampanga:** Apalit, Arayat, and Candaba

**Tarlac:** Concepcion, La Paz, and Tarlac City

## Monitoring date

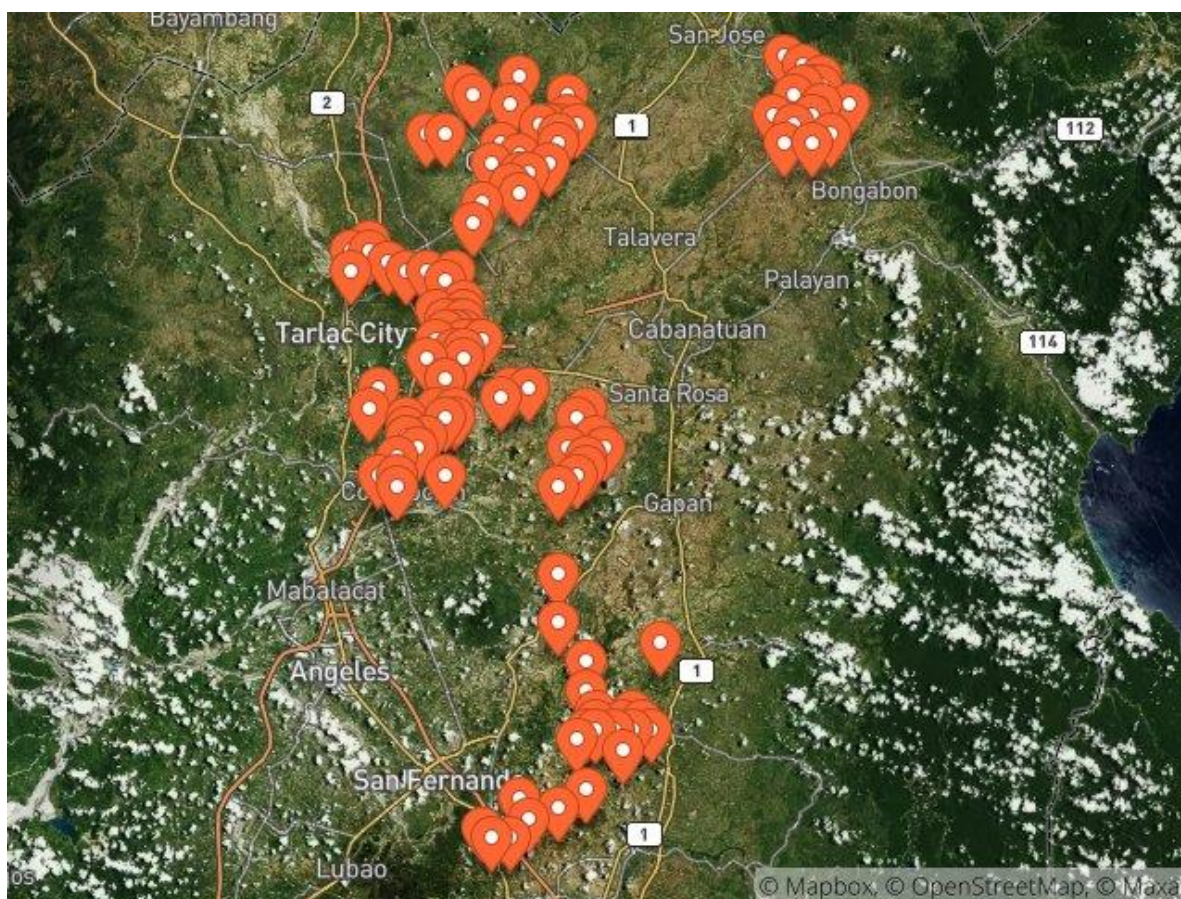
January 2020 - June 2020

## Number of monitoring fields

405

## Data collectors

Analie Siababa, Anthony Antonio, Blessed Hope Peridas, Bryan Agustin, Caesar Siababa, Frederick Gomez, Jerome Yambao, Jerome Yambao, Jomar Ped, Margie Quibuyen, Mariel Tayag, Mark Joseph Esteban, Mildred Echalas, Ryan Apostol, and Yam Bartolome



**FIGURE 2. Monitored barangays in Region III from January 2020 to June 2020. Each barangay is represented by 1 marker.**

Disclaimer: All the data presented in this report are based on the monthly monitoring of farmers' fields by regional data collectors of PRIME.

**Municipalities surveyed**

**Nueva Ecija:** Guimba, Rizal, and San Antonio

**Pampanga:** Apalit, Arayat, and Candaba

**Tarlac:** Concepcion, La Paz, and Tarlac City

**Monitoring date**

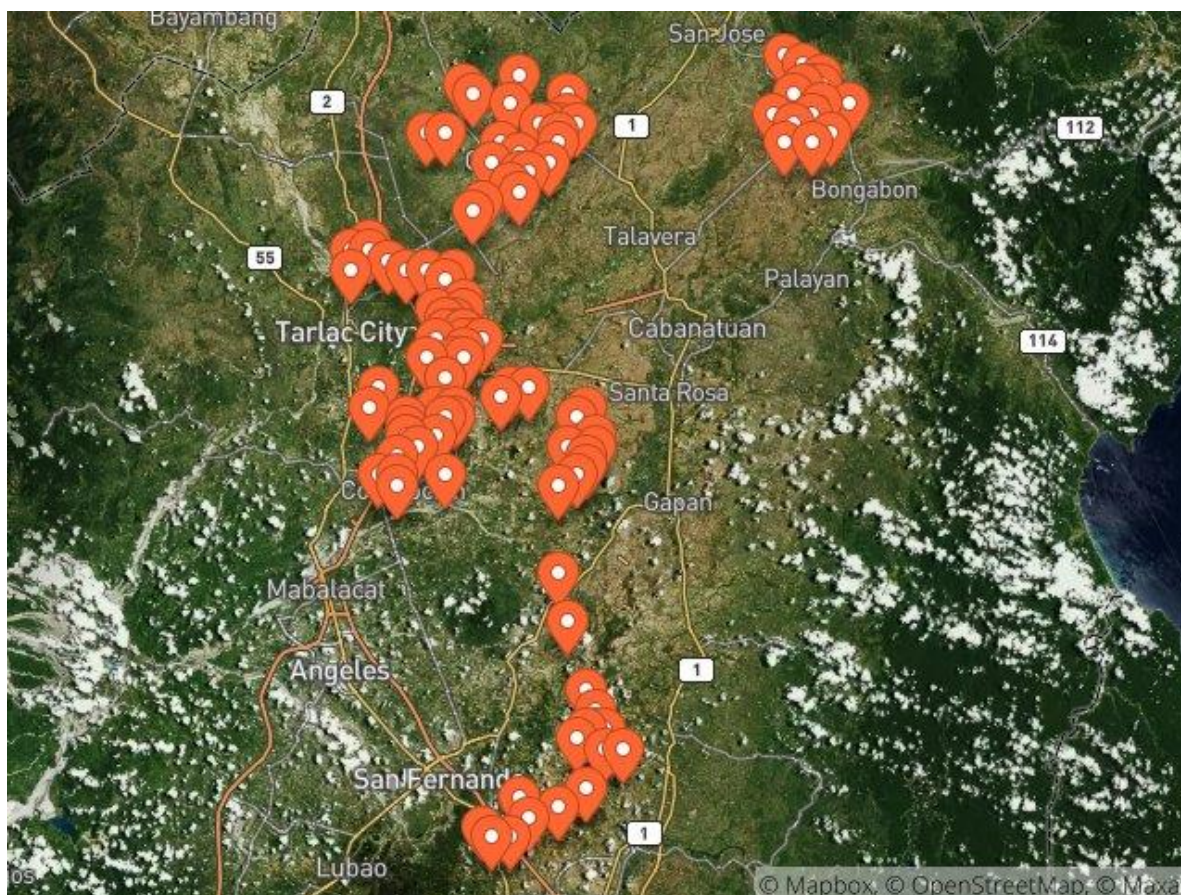
January 2019 - June 2019

**Number of monitoring fields**

367

**Data collectors**

Analie Siababa, Blessed Hope Peridas, Caesar Siababa, Emerizza Mendoza, Frederick Gomez, Jomar Ped, Margie Quibuyen, Mark Angelo Urma, Mark Joseph Esteban, Mildred Echalas, Roel Espiritu, and Ryan Apostol



**FIGURE 3. Monitored barangays in Region III from January 2019 to June 2019. Each barangay is represented by 1 marker.**

Disclaimer: All the data presented in this report are based on the monthly monitoring of farmers' fields by regional data collectors of PRIME.

# At a glance

**Table 3. Mean incidence of pest injuries, count of insect pests, and percentage of weed cover by month from January to June 2020.**

Region III	2020					
	JAN	FEB	MAR	APR	MAY	JUN
<b>A. FOLIAR DISEASES</b>						
Bacterial leaf blight	0.1	0.9	0.1	0	0	0.1
Bacterial leaf streak	0.1	0.1	0.1	0	0	0.0
Brown spot	0.1	0.2	0.1	0	0	0.1
Leaf blast	0.1	0.3	0.1	0	0	0.2
Red stripe	0.0	0.0	0.0	0	0	0.0
<b>B. DISEASE OR PEST INJURY ON TILLERS</b>						
Deadheart	0.1	0.1	0.0	0	0	0.0
Sheath blight	0.0	0.2	0.1	0	0	0.0
<b>C. DISEASE OR PEST INJURY ON PANICLES</b>						
Neck blast	0.1	0.1	0.0	0	0	0.0
Whitehead	0.8	0.7	0.4	0	0	0.0
<b>D. SYSTEMIC DISEASE OR PEST INJURY</b>						
Bugburn	0.0	0.0	0.0	0	0	0.0
Hopperburn	0.0	0.0	0.0	0	0	0.0
Tungro	0.0	0.0	0.0	0	0	0.0
<b>E. INSECT COUNT</b>						
Brown planthopper	0.0	0.1	0.1	0	0	0.0
Green leafhopper	0.1	0.0	0.0	0	0	0.0
Rice black bug	0.0	0.0	0.0	0	0	0.0
Rice bug	0.0	0.1	0.0	0	0	0.0
Rice grain bug	0.0	0.0	0.0	0	0	0.0
<b>F. RAT INJURY</b>	0.2	0.1	0.1	0	0	0.5
<b>G. WEED COVER</b>	1.6	1.8	1.8	0	0	4.0

Mean of all monitoring fields.

LEGEND

1-5 % or 1-5 insects

>5 % or >5 insects

Disclaimer: All the data presented in this report are based on the monthly monitoring of farmers' fields by regional data collectors of PRIME.

**Table 4. Mean incidence of pest injuries, count of insect pests, and percentage of weed cover by month from January to June 2019.**

Region III	2019					
	JAN	FEB	MAR	APR	MAY	JUN
<b>A. FOLIAR DISEASES</b>						
Bacterial leaf blight	0.0	0.2	0.1	0.1	0.1	0.1
Bacterial leaf streak	0.1	0.1	0.1	0.0	0.1	0.1
Brown spot	0.0	0.0	0.0	0.0	0.2	0.5
Leaf blast	0.0	0.0	0.0	0.0	0.3	0.5
Red stripe	0.0	0.0	0.0	0.0	0.0	0.0
<b>B. DISEASE OR PEST INJURY ON TILLERS</b>						
Deadheart	0.2	0.0	0.0	0.0	0.0	0.0
Sheath blight	0.0	0.0	0.0	0.1	0.0	0.8
<b>C. DISEASE OR PEST INJURY ON PANICLES</b>						
Neck blast	0	0.0	0.0	0.0	0.0	0.0
Whitehead	0	0.3	0.1	0.5	0.4	0.1
<b>D. SYSTEMIC DISEASE OR PEST INJURY</b>						
Bugburn	0.0	0.0	0.0	0.0	0.0	0.0
Hopperburn	0.0	0.0	0.0	0.0	0.0	0.0
Tungro	0.0	0.0	0.0	0.0	0.0	0.0
<b>E. INSECT COUNT</b>						
Brown planthopper	0.0	0.1	0.7	0.5	0.1	0.1
Green leafhopper	0.1	0.1	0.2	0.1	0.1	0.1
Rice black bug	0.0	0.0	0.0	0.0	0.0	0.0
Rice bug	0.0	0.1	0.0	0.1	0.1	0.0
Rice grain bug	0.0	0.0	0.0	0.0	0.0	0.0
<b>F. RAT INJURY</b>	0.0	0.0	0.0	0.0	0.0	0.0
<b>G. WEED COVER</b>	0.4	1.5	2.1	2.1	5.5	4.4

Mean of all monitoring fields.

LEGEND

1-5 % or 1-5 insects

>5 % or >5 insects

Disclaimer: All the data presented in this report are based on the monthly monitoring of farmers' fields by regional data collectors of PRIME.




# Management of major pests

This section describes the management of the most important pests during the reporting period. A pest is operationally considered important if the mean incidence in at least one month was 5% or higher.

## Deadheart and whitehead caused by stemborer

1. Know the peak of yellow stem borer population in the area. This can be done using light traps. Do not transplant or sow seeds when insect population is high.
2. Consider the use of pheromones to control stemborers.
3. The most practical and economical approach to manage whitehead is to grow a resistant variety. Rotate varieties with different levels of resistance because a resistant variety may later become susceptible if grown continuously across several cropping seasons.
4. Practice planting synchrony with defined fallow period in your area. Asynchronous planting results in overlapping generations of stemborer throughout the year. If this is not possible, a farmer who intends to grow a susceptible variety should not establish his crop later than most farmers' fields.
5. Raise level of irrigation water periodically to submerge the eggs on the lower parts of the plant.
6. Manage the application of nutrient fertilizers. Apply the required amount of nitrogen in splits instead of applying all the required amount at the start of the cropping season. Nitrogen makes the plant tissues softer and facilitates penetration of stemborer larvae.
7. Remove alternate hosts during the cropping season and fallow period.
8. If high infestation occurred, cut stubbles close to the ground and dry or remove stubbles from the field. A less laborious option is to plow the field during fallow to bury stubbles.
9. Do not apply insecticides during the early vegetative stage. Systemic insecticides may be applied after the vegetative stage. Systemic insecticides were found to be more effective than contact insecticides because the larvae and pupae are inside the stem. Insecticides should be used with extreme caution. Monitor the population of stemborers and intensity of deadheart or whitehead prior to the application of insecticides because its efficacy is low when generations of stemborer overlap and when damage is already severe.





Insecticides should be used as the last resort and should be integrated with other methods to conserve natural enemies.

## Weeds

1. Plow and harrow the field several times before crop establishment. If feasible, start land preparation 3-4 weeks before planting.
2. If weedy rice is a problem, apply glyphosate before land preparation or seeding. The application of pretilachlor with fenclorim during final land preparation or levelling has also been reported to reduce weedy rice.
3. Practice stale seedbed technique. According to the IRRI Knowledge Bank (<http://www.knowledgebank.irri.org/step-by-step-production/growth/weed-management/stale-seedbed-technique>), this technique is done as follows:
  - a. Perform tillage operations. Plow, harrow, and level the field.
  - b. Stimulate weed emergence by light irrigation.
  - c. Irrigate the field at least two weeks before sowing.
  - d. Maintain enough soil moisture to allow weeds to germinate.
  - e. Kill the emerged seedlings using non-selective herbicides (e.g., glyphosate) or light cultivation.
  - f. If the soil condition is suitable for sowing, broadcast seeds without further tillage operations. Tillage could bring more weed seeds near the soil surface, thus promoting weed germination.
4. Level the field to ensure a constant water level that controls weeds. Avoid high spots where weeds can grow.
5. Apply pre-emergence herbicide (e.g., pretilachlor + fenclorim 2-3 days after sowing). Follow recommended amount and timing of product and water condition in the field as indicated in the label. Do not use the same herbicide over long periods to prevent herbicide resistance.
6. If grass weeds are the main weed problem, apply early post-emergence herbicide.
7. Maintain a 2-5 cm water level in the field to minimize weed emergence. If water is sufficient, flood the fields until closure of the plant canopy.



8. Apply nitrogen fertilizer just after weeding to minimize rice-weed competition for nitrogen.
9. If feasible, consider the use of biological control agents to suppress growth or reduce population of weeds.
10. If feasible, plow the field during fallow to kill weeds and prevent the build-up of weed seeds in the soil.

# Annexes

## Annex 1. Incidence of diseases or pest injuries during the previous 1st semesters.

Region III		2019						2020					
Nueva Ecija		JAN	FEB	MAR	APR	MAY	JUN	JAN	FEB	MAR	APR	MAY	JUN
<b>A. FOLIAR DISEASES</b>													
Bacterial leaf blight	mean	0.0	0.2	0.0	0.0	0.1	0.1	0.0	1.3	0.1	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	7.6	3.1	0.5	1.3	1.5	0.7	13.9	1.5	0.0	0.0	0.0
	no. of fields	80	142	170	119	17	20	155	155	152	0	0	2
Bacterial leaf streak	mean	0.1	0.1	0.1	0.0	0.3	0.3	0.0	0.1	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	3.0	6.0	5.9	0.0	3.4	2.1	0.3	3.5	0.0	0.0	0.0	0.0
	no. of fields	80	142	170	119	17	20	155	155	152	0	0	2
Brown spot	mean	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	2.1	0.8	1.5	0.0	17.0	0.0	0.7	0.0	0.0	0.0	0.0
	no. of fields	80	142	170	119	17	20	155	155	152	0	0	2
Leaf blast	mean	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.2	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.3	1.3	1.5	0.2	0.0	10.6	0.0	2.0	1.3	0.0	0.0	0.0
	no. of fields	80	142	170	119	17	20	155	155	152	0	0	2
Red stripe	mean	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	no. of fields	80	142	170	119	17	20	155	155	152	0	0	2
<b>B. DISEASE OR PEST INJURY ON TILLERS</b>													
Deadheart	mean	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	3.3	1.5	2.9	0.0	0.0	0.0	3.0	1.7	1.5	0.0	0.0	0.0
	no. of fields	80	142	170	119	17	20	155	155	152	0	0	2
Sheath blight	mean	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.9	3.3	0.0	0.0	0.0	1.7	2.3	0.0	0.0	0.0
	no. of fields	80	142	170	119	17	20	155	155	152	0	0	2
<b>LEGEND</b>													
<b>Blue font</b>	5 to 10 % incidence of diseases, insect pest injuries or weed cover or 5 to 10 insects.												
<b>Red font</b>	> 10 % incidence of diseases, insect pest injuries or weed cover or > 10 insects.												

Disclaimer: All the data presented in this report are based on the monthly monitoring of farmers' fields by regional data collectors of PRIME.

## Annex 2. Incidence of diseases or pest injuries during the previous 1st semesters.

Region III		2019						2020					
Nueva Ecija		JAN	FEB	MAR	APR	MAY	JUN	JAN	FEB	MAR	APR	MAY	JUN
<b>C. DISEASE OR PEST INJURY ON PANICLES</b>													
Neck blast	mean	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0
	no. of fields	0	16	73	101	6	2	1	28	124	0	0	0
Whitehead	mean	0.0	0.3	0.1	0.5	0.0	0.4	0.0	0.5	0.4	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	2.5	1.7	11.8	0.0	0.7	0.0	2.3	7.2	0.0	0.0	0.0
	no. of fields	0	16	73	101	6	2	1	28	124	0	0	0
<b>D. SYSTEMIC DISEASE OR PEST INJURY</b>													
Bugburn	mean	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	no. of fields	80	142	170	119	17	20	155	155	152	0	0	2
Hopperburn	mean	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	no. of fields	80	142	170	119	17	20	155	155	152	0	0	2
Tungro	mean	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	no. of fields	80	142	170	119	17	20	155	155	152	0	0	2
<b>LEGEND</b>													
<b>Blue font</b>	5 to 10 % incidence of diseases, insect pest injuries or weed cover or 5 to 10 insects.												
<b>Red font</b>	> 10 % incidence of diseases, insect pest injuries or weed cover or > 10 insects.												

Disclaimer: All the data presented in this report are based on the monthly monitoring of farmers' fields by regional data collectors of PRIME.

### Annex 3. Incidence of pest injuries, count of insect pests, and percentage of weed cover during the previous 1st semesters.

Region III		2019						2020					
Nueva Ecija		JAN	FEB	MAR	APR	MAY	JUN	JAN	FEB	MAR	APR	MAY	JUN
<b>E. INSECT COUNT</b>													
Brown planthopper	mean	0.0	0.1	0.7	0.7	0.2	0.1	0.0	0.1	0.1	0.0	0.0	0.0
	median	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.1	5.0	23.9	8.2	1.1	1.0	0.1	0.9	3.7	0.0	0.0	0.0
	no. of fields	80	142	170	119	17	20	155	155	152	0	0	2
Green leafhopper	mean	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.7	1.8	1.5	0.8	0.6	0.9	1.1	0.4	0.7	0.0	0.0	0.0
	no. of fields	80	142	170	119	17	20	155	155	152	0	0	2
Rice black bug	mean	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
	no. of fields	80	142	170	119	17	20	155	155	152	0	0	2
Rice bug	mean	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	1.3	1.0	1.0	0.3	0.7	0.3	0.7	0.0	0.0	0.0	0.0
	no. of fields	80	142	170	119	17	20	155	155	152	0	0	2
Rice grain bug	mean	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	no. of fields	80	142	170	119	17	20	155	155	152	0	0	2
<b>F. RAT INJURY</b>	mean	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	1.0	3.5	0.0	1.0	1.0	3.5	1.0	0.0	0.0	0.0
	no. of fields	80	142	170	119	17	20	155	155	152	0	0	2
<b>G. WEED COVER</b>	mean	0.4	1.5	1.9	2.4	4.2	11.3	0.6	1.0	0.8	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	20.0	48.3	45.0	80.0	45.0	45.0	15.0	21.7	5.0	0.0	0.0	0.0
	no. of fields	80	142	170	119	17	20	155	155	152	0	0	2
<b>LEGEND</b>													
<b>Blue font</b>	5 to 10 % incidence of diseases, insect pest injuries or weed cover or 5 to 10 insects.												
<b>Red font</b>	> 10 % incidence of diseases, insect pest injuries or weed cover or > 10 insects.												

Disclaimer: All the data presented in this report are based on the monthly monitoring of farmers' fields by regional data collectors of PRIME.

## Annex 4. Incidence of diseases or pest injuries during the previous 1st semesters.

Region III		2019						2020					
Pampanga		JAN	FEB	MAR	APR	MAY	JUN	JAN	FEB	MAR	APR	MAY	JUN
<b>A. FOLIAR DISEASES</b>													
Bacterial leaf blight	mean	0.0	0.0	0.0	0.1	0.0	0.3	0.2	0.3	0.2	0.0	0.0	0.1
	median	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.9	0.1	3.0	3.1	3.7	2.2	0.0	0.0	0.9
	no. of fields	0	0	0	12	21	21	66	96	94	0	0	18
Bacterial leaf streak	mean	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.4	0.0	0.1	2.4	1.9	3.9	0.0	0.0	0.5
	no. of fields	0	0	0	12	21	21	66	96	94	0	0	18
Brown spot	mean	0.0	0.0	0.0	0.0	0.1	0.3	0.1	0.0	0.2	0.0	0.0	0.1
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.0	1.4	4.2	1.2	1.1	3.4	0.0	0.0	1.3
	no. of fields	0	0	0	12	21	21	66	96	94	0	0	18
Leaf blast	mean	0.0	0.0	0.0	0.1	0.2	0.7	0.1	0.4	0.2	0.0	0.0	0.2
	median	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.2	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.5	1.8	2.4	1.3	3.2	2.0	0.0	0.0	0.9
	no. of fields	0	0	0	12	21	21	66	96	94	0	0	18
Red stripe	mean	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	no. of fields	0	0	0	12	21	21	66	96	94	0	0	18
<b>B. DISEASE OR PEST INJURY ON TILLERS</b>													
Deadheart	mean	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.1	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.0	0.0	2.3	10.7	0.0	2.8	0.0	0.0	0.0
	no. of fields	0	0	0	12	21	21	66	96	94	0	0	18
Sheath blight	mean	0.0	0.0	0.0	0.0	0.0	2.4	0.1	0.0	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.0	0.0	50.0	1.4	0.7	1.1	0.0	0.0	0.0
	no. of fields	0	0	0	12	21	21	66	96	94	0	0	18
<b>LEGEND</b>													
<b>Blue font</b>	5 to 10 % incidence of diseases, insect pest injuries or weed cover or 5 to 10 insects.												
<b>Red font</b>	> 10 % incidence of diseases, insect pest injuries or weed cover or > 10 insects.												

Disclaimer: All the data presented in this report are based on the monthly monitoring of farmers' fields by regional data collectors of PRIME.

## Annex 5. Incidence of diseases or pest injuries during the previous 1st semesters.

Region III		2019						2020					
Pampanga		JAN	FEB	MAR	APR	MAY	JUN	JAN	FEB	MAR	APR	MAY	JUN
<b>C. DISEASE OR PEST INJURY ON PANICLES</b>													
Neck blast	mean	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0
	no. of fields	0	0	0	5	6	3	20	18	53	0	0	1
Whitehead	mean	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.0	0.0	0.3	6.5	0.0	1.4	0.0	0.0	0.0
	no. of fields	0	0	0	5	6	3	20	18	53	0	0	1
<b>D. SYSTEMIC DISEASE OR PEST INJURY</b>													
Bugburn	mean	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	no. of fields	0	0	0	12	21	21	66	96	94	0	0	18
Hopperburn	mean	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	no. of fields	0	0	0	12	21	21	66	96	94	0	0	18
Tungro	mean	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	no. of fields	0	0	0	12	21	21	66	96	94	0	0	18
<b>LEGEND</b>													
<b>Blue font</b>	5 to 10 % incidence of diseases, insect pest injuries or weed cover or 5 to 10 insects.												
<b>Red font</b>	> 10 % incidence of diseases, insect pest injuries or weed cover or > 10 insects.												

Disclaimer: All the data presented in this report are based on the monthly monitoring of farmers' fields by regional data collectors of PRIME.

## Annex 6. Incidence of pest injuries, count of insect pests, and percentage of weed cover during the previous 1st semesters.

Region III		2019						2020					
Pampanga		JAN	FEB	MAR	APR	MAY	JUN	JAN	FEB	MAR	APR	MAY	JUN
<b>E. INSECT COUNT</b>													
Brown planthopper	mean	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.0	0.0	0.5	0.4	0.2	0.3	0.0	0.0	0.0
	no. of fields	0	0	0	12	21	21	66	96	94	0	0	18
Green leafhopper	mean	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.6	0.3	0.7	0.3	0.4	0.2	0.0	0.0	0.0
	no. of fields	0	0	0	12	21	21	66	96	94	0	0	18
Rice black bug	mean	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.1	0.0	0.0	0.0
	no. of fields	0	0	0	12	21	21	66	96	94	0	0	18
Rice bug	mean	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.3	1.3	0.0	0.0	1.0	0.3	0.0	0.0	0.0
	no. of fields	0	0	0	12	21	21	66	96	94	0	0	18
Rice grain bug	mean	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
	no. of fields	0	0	0	12	21	21	66	96	94	0	0	18
<b>F. RAT INJURY</b>	mean	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.1	0.2	0.0	0.0	0.6
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.0	0.0	0.0	1.0	3.5	3.5	0.0	0.0	3.5
	no. of fields	0	0	0	12	21	21	66	96	94	0	0	18
<b>G. WEED COVER</b>	mean	0.0	0.0	0.0	0.1	9.1	0.4	0.6	0.5	2.9	0.0	0.0	4.4
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	1.7	80.0	5.0	10.0	20.0	80.0	0.0	0.0	68.3
	no. of fields	0	0	0	12	21	21	66	96	94	0	0	18
<b>LEGEND</b>													
<b>Blue font</b>	5 to 10 % incidence of diseases, insect pest injuries or weed cover or 5 to 10 insects.												
<b>Red font</b>	> 10 % incidence of diseases, insect pest injuries or weed cover or > 10 insects.												

Disclaimer: All the data presented in this report are based on the monthly monitoring of farmers' fields by regional data collectors of PRIME.



## Annex 7. Incidence of diseases or pest injuries during the previous 1st semesters.

Region III		2019						2020					
Tarlac		JAN	FEB	MAR	APR	MAY	JUN	JAN	FEB	MAR	APR	MAY	JUN
<b>A. FOLIAR DISEASES</b>													
Bacterial leaf blight	mean	0.0	0.0	0.1	0.6	0.2	0.0	0.4	0.8	0.2	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	1.4	7.4	3.6	0.1	2.2	3.9	2.1	0.0	0.0	0.0
	no. of fields	0	1	18	22	18	30	72	49	16	0	0	0
Bacterial leaf streak	mean	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	1.2	0.0	0.2	2.7	1.2	0.0	0.0	0.0	0.0
	no. of fields	0	1	18	22	18	30	72	49	16	0	0	0
Brown spot	mean	0.0	0.0	0.0	0.1	0.6	0.1	0.4	1.1	0.9	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	1.5	1.8	3.2	3.4	6.3	7.8	0.0	0.0	0.0
	no. of fields	0	1	18	22	18	30	72	49	16	0	0	0
Leaf blast	mean	0.0	0.0	0.2	0.2	0.7	0.1	0.1	0.5	0.1	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	1.0	0.7	2.5	2.5	2.2	4.3	0.7	0.0	0.0	0.0
	no. of fields	0	1	18	22	18	30	72	49	16	0	0	0
Red stripe	mean	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
	no. of fields	0	1	18	22	18	30	72	49	16	0	0	0
<b>B. DISEASE OR PEST INJURY ON TILLERS</b>													
Deadheart	mean	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.3	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.0	1.4	0.0	5.3	4.8	0.0	0.0	0.0	0.0
	no. of fields	0	1	18	22	18	30	72	49	16	0	0	0
Sheath blight	mean	0.0	0.0	0.0	0.0	0.0	0.1	0.1	1.4	1.1	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.0	0.0	2.4	1.7	21.3	9.2	0.0	0.0	0.0
	no. of fields	0	1	18	22	18	30	72	49	16	0	0	0
<b>LEGEND</b>													
<b>Blue font</b>	5 to 10 % incidence of diseases, insect pest injuries or weed cover or 5 to 10 insects.												
<b>Red font</b>	> 10 % incidence of diseases, insect pest injuries or weed cover or > 10 insects.												

Disclaimer: All the data presented in this report are based on the monthly monitoring of farmers' fields by regional data collectors of PRIME.

## Annex 8. Incidence of diseases or pest injuries during the previous 1st semesters.

Region III		2019						2020					
Tarlac		JAN	FEB	MAR	APR	MAY	JUN	JAN	FEB	MAR	APR	MAY	JUN
<b>C. DISEASE OR PEST INJURY ON PANICLES</b>													
Neck blast	mean	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.0	0.0	0.0	3.7	3.5	1.3	0.0	0.0	0.0
	no. of fields	0	0	3	0	4	7	26	42	10	0	0	0
Whitehead	mean	0.0	0.0	0.0	0.0	1.6	0.0	1.1	1.1	1.8	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.0	6.5	0.0	11.0	16.9	9.2	0.0	0.0	0.0
	no. of fields	0	0	3	0	4	7	26	42	10	0	0	0
<b>D. SYSTEMIC DISEASE OR PEST INJURY</b>													
Bugburn	mean	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	no. of fields	0	1	18	22	18	30	72	49	16	0	0	0
Hopperburn	mean	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	no. of fields	0	1	18	22	18	30	72	49	16	0	0	0
Tungro	mean	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	no. of fields	0	1	18	22	18	30	72	49	16	0	0	0
<b>LEGEND</b>													
<b>Blue font</b>	5 to 10 % incidence of diseases, insect pest injuries or weed cover or 5 to 10 insects.												
<b>Red font</b>	> 10 % incidence of diseases, insect pest injuries or weed cover or > 10 insects.												

Disclaimer: All the data presented in this report are based on the monthly monitoring of farmers' fields by regional data collectors of PRIME.

## Annex 9. Incidence of pest injuries, count of insect pests, and percentage of weed cover during the previous 1st semesters.

Region III		2019						2020					
Tarlac		JAN	FEB	MAR	APR	MAY	JUN	JAN	FEB	MAR	APR	MAY	JUN
<b>E. INSECT COUNT</b>													
Brown planthopper	mean	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.1	0.2	0.7	0.6	0.4	0.5	0.2	0.0	0.0	0.0
	no. of fields	0	1	18	22	18	30	72	49	16	0	0	0
Green leafhopper	mean	0.0	0.0	0.0	0.2	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.2	3.0	0.3	1.0	0.3	0.6	0.4	0.0	0.0	0.0
	no. of fields	0	1	18	22	18	30	72	49	16	0	0	0
Rice black bug	mean	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.3	0.0	0.0	0.8	1.1	0.3	0.0	0.0	0.0
	no. of fields	0	1	18	22	18	30	72	49	16	0	0	0
Rice bug	mean	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.6	0.3	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.3	1.7	0.0	0.3	1.0	2.0	1.0	0.0	0.0	0.0
	no. of fields	0	1	18	22	18	30	72	49	16	0	0	0
Rice grain bug	mean	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0
	no. of fields	0	1	18	22	18	30	72	49	16	0	0	0
<b>F. RAT INJURY</b>	mean	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.0	0.0	0.0	1.0	3.5	3.5	0.0	0.0	0.0	0.0
	no. of fields	0	1	18	22	18	30	72	49	16	0	0	0
<b>G. WEED COVER</b>	mean	0.0	0.0	4.5	1.4	2.4	2.7	4.8	7.5	3.7	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	80.0	28.3	20.0	68.3	45.0	45.0	28.3	0.0	0.0	0.0
	no. of fields	0	1	18	22	18	30	72	49	16	0	0	0
<b>LEGEND</b>													
<b>Blue font</b>	5 to 10 % incidence of diseases, insect pest injuries or weed cover or 5 to 10 insects.												
<b>Red font</b>	> 10 % incidence of diseases, insect pest injuries or weed cover or > 10 insects.												

Disclaimer: All the data presented in this report are based on the monthly monitoring of farmers' fields by regional data collectors of PRIME.