

PRE-SEMESTER BULLETIN

December 2020

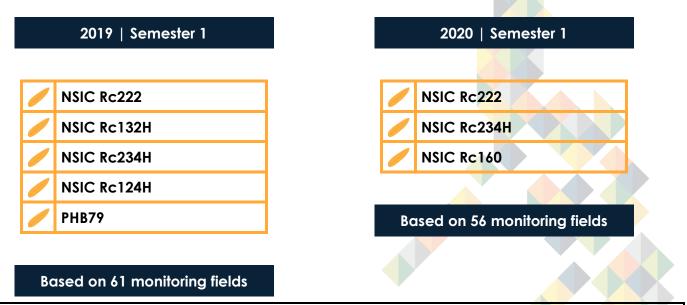
REGION I - ILOCOS REGION

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.



Growth stages

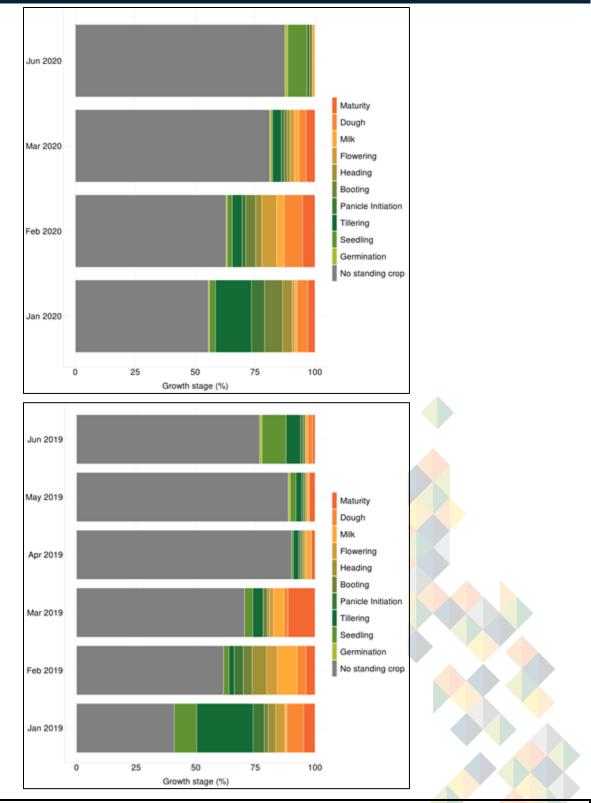
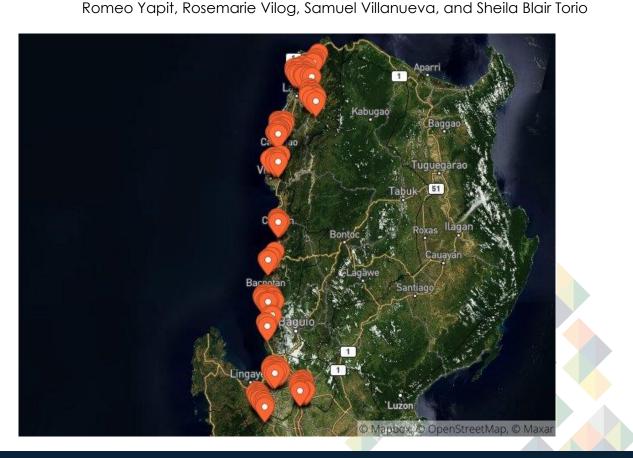


FIGURE 1. Percentage of crop growth stage of fields by month.

Monitored fields and data collectors

Municipalities	Ilocos Norte: Bacarra, Dingras, and Vintar
surveyed	Ilocos Sur: Bantay, Cabugao, Santa Lucia, and Sinait
	La Union: Agoo, Aringay, Bangar, Bauang, Luna, and Naguilian
	Pangasinan: Mangatarem, Rosales, and Santa Barbara
Monitoring date	January 2020 - June 2020
Number of monitoring fields	204
Data collectors	Alvin Lawrence Natividad, Cesar Vidad, Chris Quinto, Clemente Viernes, Comelia Opinaldo, Cornelio Balbesino, Elizabeth Carreon, Florie Mae Chung,
	Franz Aslor, Freida Aquino, Grace Gotgotao, Jayson Anthony Domingo, Joey Gapuzan, Juan de Guzman, Juvy Aromin, Kristel Mae Yadao, Mark Joseph Bautista, Marvin Estoesta, Noemi Inong, Obas Baclig, Oliver Jasmin, Perlira



Corpuz, Raymond Tunac, Raymund Sarmiento, Ricardo Jr Navarro, Romel Pio,

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

Municipalities	Ilocos Norte: Bacarra, Dingras, and Vintar
surveyed	Ilocos Sur: Bantay, Cabugao, Santa Lucia, and Sinait
	La Union: Agoo, Aringay, Bangar, Bauang, Luna, and Naguilian
	Pangasinan: Mangatarem, Rosales, and Santa Barbara
Monitoring date	January 2019 - June 2019
Number of monitoring fields	138
Data collectors	Cesar Vidad, Chris Quinto, Clemente Viernes, Comelia Opinaldo, Cornelio Balbesino, Elizabeth Carreon, Florie Mae Chung, Frederick Gomez, Freida Aquino, Grace Gotgotao, Jayson Anthony Domingo, Jhonas Marion Visitac Joey Gapuzan, Jordan Briones, Juan de Guzman, Juvy Aromin, Katrine Joy

Aquino, Grace Gotgotao, Jayson Anthony Domingo, Jhonas Marion Visitacion, Joey Gapuzan, Jordan Briones, Juan de Guzman, Juvy Aromin, Katrine Joy Tapuro, Leander de la Rosa, Leodivico Verzola, Maria Cristina Rarogal, Marvin Estoesta, Noemi Inong, Oliver Jasmin, Perlira Corpuz, Raquel Lopez, Raymond Tunac, Raymund Sarmiento, Regina Labiano, Ricardo Jr Navarro, Romel Pio, Romeo Yapit, Rosemarie Vilog, Samuel Villanueva, Sheila Blair Torio, and Victoria Cavinta

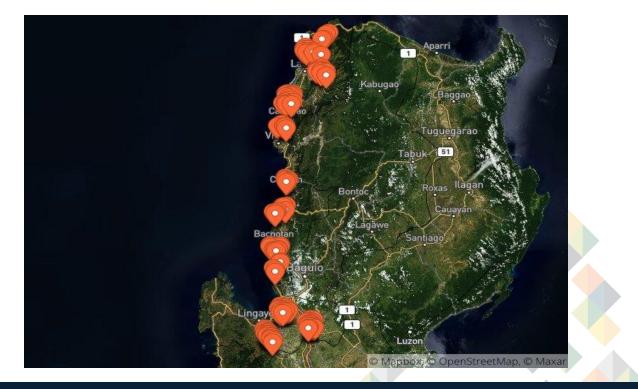


FIGURE 3. Monitored barangays in Region I from January 2019 to June 2019. Each barangay is represented by 1 marker.

At a glance

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

Region I			202	0		
	JAN	FEB	MAR	APR	MAY	JUN
A. FOLIAR DISEASES						
Bacterial leaf blight	0.7	1.0	1.0	0	0	0.2
Bacterial leaf streak	0.2	0.2	0.1	0	0	0.2
Brown spot	1.0	1.9	1.1	0	0	1.2
Leaf blast	0.9	1.7	1.4	0	0	0.0
Red stripe	0.0	0.0	0.0	0	0	0.0
B. DISEASE OR PEST INJU	RY ON TILLERS					
Deadheart	0.3	0.5	0.2	0	0	0.0
Sheath blight	0.0	0.1	0.0	0	0	0.0
C. DISEASE OR PEST INJU	RY ON PANICLES					
Neck blast	0.2	0.6	0.0	0	0	0.0
Whitehead	2.9	0.9	2.6	0	0	1.3
D. SYSTEMIC DISEASE OR	PEST INJURY					
Bugburn	0.0	0.0	0.0	0	0	0.0
Hopperburn	0.1	0.0	0.1	0	0	0.0
Tungro	0.0	0.0	0.0	0	0	0.0
E. INSECT COUNT						
Brown planthopper	0.0	0.0	0.1	0	0	0.0
Green leafhopper	0.1	0.1	0.3	0	0	0.0
Rice black bug	0.0	0.0	0.0	0	0	0.0
Rice bug	0.3	0.3	0.5	0	0	0.0
Rice grain bug	0.0	0.1	0.0	0	0	0.0
F. RAT INJURY	0.0	0.0	0.0	0	0	0.0
G. WEED COVER	1.7	1.3	3.9	0	0	3.5

Mean of all monitoring fields.

LEGEND

1-5 % or 1-5 insects

>5 % or >5 insects



Region I			201	9		
	JAN	FEB	MAR	APR	MAY	NUL
A. FOLIAR DISEASES						
Bacterial leaf blight	2.1	1.2	1.5	1.1	1.2	0.6
Bacterial leaf streak	0.3	0.2	0.0	0.3	0.0	0.0
Brown spot	2.2	1.7	2.7	4.1	8.3	5.7
Leaf blast	0.4	0.4	0.1	0.8	0.1	0.5
Red stripe	0.0	0.0	0.2	0.0	0.0	0.0
B. DISEASE OR PEST INJUR	RY ON TILLERS					
Deadheart	0.3	0.4	0.6	0.7	0.2	0.4
Sheath blight	0.2	0.2	0.3	1.4	2.5	0.7
C. DISEASE OR PEST INJUR	Y ON PANICLES					
Neck blast	0.1	0.1	0.0	0.0	0.0	0.0
Whitehead	1.9	0.9	0.9	4.4	0.8	2.2
D. SYSTEMIC DISEASE OR F	PEST INJURY					
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
E. INSECT COUNT						
Brown planthopper	0.0	0.0	0.2	0.6	0.0	0.0
Green leafhopper	0.1	0.1	0.1	0.2	0.0	0.0
Rice black bug	0.1	0.0	0.0	0.0	0.0	0.0
Rice bug	0.2	0.2	0.2	0.5	0.3	0.3
Rice grain bug	0.0	0.0	0.0	0.2	0.0	0.0
F. RAT INJURY	0.0	0.1	0.1	0.2	0.1	0.0
G. WEED COVER	1.8	1.8	3.9	1.3	0.4	2.7

1-5 % or 1-5 insects

>5 % or >5 insects

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.

Bacterial leaf blight

- 1. The most practical and economical approach to manage blast 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.
- 2. Use optimum seeding rate (80 kg per hectare) for direct-seeded rice and optimum plant spacing (e.g., 20cm x 20cm) for transplanted rice. A dense plant canopy creates a favorable microclimate for disease development (reduced sunlight penetration, longer leaf wetness duration and cooler temperature).
- 3. Apply only the recommended amount of nitrogen. Excessive amount of nitrogen favors the development of most rice diseases.
- 4. Manage the application of nutrient fertilizer. 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 creates a dense canopy that results in favorable microclimate for disease development.
- 5. Apply potassium and other required nutrients in addition to nitrogen. Potassium reduces the amount of most rice diseases.
- 6. Apply calcium silicate fertilizer or silicon fertilizer when feasible.
- 7. Remove weeds from the field because the pathogen can survive and cause disease on several weed species.
- 8. Use copper fungicides as last resort in controlling the disease. Copper fungicides should be applied with caution because copper accumulates in the soil surface (does not leach easily) and in the roots. Copper toxicity deforms roots and may eventually reduce yield.
- Avoid using antibiotics because bacteria easily develop resistance to antibiotics. IRRI plant pathologists have observed that several strains of isolates collected from farmers' fields in the Philippines are resistant to antibiotics.



- 10. If plants had severe disease, cut the stubbles close to the ground and remove them from the field. A less laborious option is to immediately plow or rotavate the field after harvest to incorporate infected stubbles and crop residues in the soil.
- 11. Avoid rationing because the pathogen can survive on ration.
- 12. Keep the field dry during the fallow period to control the pathogens in infected stubbles.

Brown spot

- 1. The most practical and economical approach to manage brown spot is to grow a resistant variety
- 2. When feasible, improve soil fertility by regularly monitoring nutrients in the soil and the application of required fertilizers.
- 3. If possible, the investigate the occurrence of Akiochi, a nutritional disorder which is caused by excessive concentration of hydrogen sulfide in the soil and results in reduced nutrient uptake in some surveyed fields. Brown spot develops on plants affected by Akiochi and has, in fact, been used as its indicator. It occurs in irrigated fields that are poorly drained and have excessive organic matter. Low decomposition of stubbles, which usually occurs in areas with short fallow period, results in high organic matter.
- 4. Use certified seeds or clean seeds to prevent infected seeds. Brown spot is a seedborne disease, which means that growing an infected seed will result in diseased plants during the cropping season. Clean seeds can be cleaned manually using flotation method which consists of the following steps:
 - a. Dissolve 1.5 kg salt in 40 liters of water.
 - b. Soak seeds in the salt solution.
 - c. Stir to float diseased, unfilled and broken seeds.
 - d. Remove floating seeds by hand or with a sieve.
 - e. Wash seeds 3 to 4 times with clean water.
 - f. Dry in the shade thoroughly before sowing.
- 5. Use optimum seeding rate (80 kg per hectare) for direct-seeded rice and optimum plant spacing (e.g., 20 cm x 20 cm) for transplanted rice. A dense plant

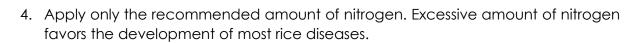


canopy reduces sunlight penetration, increases leaf wetness duration and lowers temperature in the plant canopy, creating a favorable microclimate for disease development.

- 6. Apply potassium and other required nutrients in addition to nitrogen. Potassium reduces the amount of most rice diseases.
- 7. Apply calcium silicate fertilizer or silicon fertilizer if this is available in the area.
- 8. Apply fungicides, such as iprodione, propiconazole, azoxystrobin, trifloxystrobin, and carbendazim. Seeds may also be treated with fungicides. Use fungicides as a last resort in controlling the disease. Pathogens become resistant to chemical pesticides if these are not used properly. Avoid repetitive use of a single active ingredient and mix or alternate an active ingredient with an appropriate partner. Integrate the use of chemical pesticides with cultural practices or non-chemical methods. Wherever feasible, several strategies should be used together.
- 9. If possible, irrigate the field continuously until one week before harvest. Do not drain the field for long periods because drought stress favors brown spot
- 10. If harvested plants had severe disease, immediately plow or rotavate the field after harvest to incorporate infected stubbles and crop residues in the soil.
- 11. Dry grains immediately after harvest to moisture content of at least 14%.
- 12. Store grains in sealed containers with moisture content of at least 14%.

Leaf blast and neck blast

- 1. The most practical and economical approach to manage blast 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.
- 2. Practice planting synchrony with defined fallow period in your area. If this is not possible, a farmer who intends to grow a susceptible variety should not plant rice later than most farmers' fields.
- 3. Use optimum seeding rate (80 kg per hectare) for direct-seeded rice and optimum plant spacing (e.g. 20 cm x 20 cm) for transplanted rice. A dense plant canopy creates a favorable microclimate for disease development (reduced sunlight penetration, longer leaf wetness duration and cooler temperature).



- 5. Manage the application of nutrient fertilizer. 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 creates a dense canopy that results in favorable microclimate for disease development.
- 6. Apply potassium and other required nutrients in addition to nitrogen. Potassium reduces the amount of most rice diseases.
- 7. Apply calcium silicate fertilizer or silicon fertilizer when feasible.
- 8. Irrigate the field continuously until one week before harvest. Do not drain the field for long periods because drought stress favors blast.
- 9. Use fungicides as last resort in controlling the disease. To control neck blast, apply fungicide at late booting and heading stages if leaf blast increases before booting stage and if it is always raining. Pathogens become resistant to chemical pesticides if these are not used properly. Avoid repetitive use of a single active ingredient and mix or alternate an active ingredient with an appropriate partner. Integrate the use of chemical pesticides with cultural practices or non-chemical methods. Wherever feasible, several strategies should be used together.
- 10. If plants had severe disease, cut the stubbles close to the ground and remove them from the field. A less laborious option is to immediately plow or rotavate the field after harvest to incorporate infected stubbles and crop residues in the soil.
- 11. Avoid rationing because the pathogen can survive on ration.
- 12. Keep the field dry during the fallow period to control the pathogens in infected stubbles.

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.
- 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 fenchlorim 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 I				2019						2020)		
Ilocos Nor	te	JAN	FEB	MAR	APR	MAY	JUN	JAN	FEB	MAR	APR	MAY	JUN
A. FOLIAR	DISEASES		, i				, i	- ·	· · · · ·				
Bacterial	mean	1.3	0.1	0.9	0.3	0.0	0.0	0.6	1.2	0.7	0.0	0.0	0.0
leaf blight	median	0.2	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	9.4	1.1	2.7	0.5	0.0	0.0	4.8	11.3	4.1	0.0	0.0	0.0
	no. of fields	21	12	5	2	0	1	34	27	9	0	0	2
Bacterial	mean	0.4	0.2	0.0	0.0	0.0	0.3	0.2	0.1	0.3	0.0	0.0	0.0
leaf streak	median	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	4.6	1.6	0.0	0.0	0.0	0.3	2.3	0.8	1.9	0.0	0.0	0.0
	no. of fields	21	12	5	2	0	1	34	27	9	0	0	2
Brown	mean	2.8	4.4	8.3	1.8	0.0	0.9	0.9	2.0	2.0	0.0	0.0	0.0
spot	median	0.7	0.8	0.0	1.8	0.0	0.9	0.0	0.2	0.4	0.0	0.0	0.0
	maximum	27.2	16.3	23.1	2.3	0.0	0.9	14.3	11.6	13.0	0.0	0.0	0.0
	no. of fields	21	12	5	2	0	1	34	27	9	0	0	2
Leaf blast	mean	0.8	1.0	0.3	0.0	0.0	0.0	0.1	0.2	0.6	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	3.6	7.8	1.3	0.0	0.0	0.0	1.0	0.9	3.0	0.0	0.0	0.0
	no. of fields	21	12	5	2	0	1	34	27	9	0	0	2
Red stripe	mean	0.1	0.1	0.0	0.0	0.0	0.5	0.1	0.0	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	1.7	0.9	0.0	0.0	0.0	0.5	1.2	0.4	0.2	0.0	0.0	0.0
	no. of fields	21	12	5	2	0	1	34	27	9	0	0	2
B. DISEASI	E OR PEST I	NJURY O		RS									
Deadheart	mean	0.5	0.1	0.7	3.5	0.0	0.0	0.4	0.6	0.5	0.0	0.0	0.0
	median	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	5.0	1.2	2.8	4.5	0.0	0.0	5.0	5.8	1.8	0.0	0.0	0.0
	no. of fields	21	12	5	2	0	1	34	27	9	0	0	2
Sheath	mean	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
blight	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	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	21	12	5	2	0	1	34	27	9	0	0	2
						EGEND							
Blue	font	5 to 10 %	6 incider	nce of dis	seases,	insect	pest inju	uries or w	veed cov	er or 5 to	10 inse	ects.	
Red	font	> 10 % ir	ncidence	of disea	ses, ins	sect pe	st injuri	es or wee	ed cover of	or > 10 in	sects.		

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

Region I				20	19					2020)		
Ilocos Norte		JAN	FEB	MAR	APR	мау	JUN	JAN	FEB	MAR	APR	MAY	JUN
C. DISEASE (OR PEST IN	JURY O	N PANI	CLES									
Neck blast	mean	0.0	0.4	0.0	0.0	0.0	0.0	0.5	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	2.9	0.0	0.0	0.0	0.0	3.1	2.6	0.0	0.0	0.0	0.0
	no. of fields	8	8	2	2	0	0	10	18	4	0	0	C
Whitehead	mean	0.5	0.8	0.0	3.2	0.0	0.0	1.1	1.4	0.2	0.0	0.0	0.0
	median	0.0	0.3	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	3.3	2.9	0.0	4.5	0.0	0.0	5.0	10.8	0.8	0.0	0.0	0.0
	no. of fields	8	8	2	2	0	0	10	18	4	0	0	C
D. SYSTEMIC	DISEASE	R PEST	INJUR	Y									
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	21	12	5	2	0	1	34	27	9	0	0	2
Hopperburn	mean	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	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	0.0	0.0	0.0	0.0	10.7	0.0	2.7	0.0	0.0	0.0
	no. of fields	21	12	5	2	0	1	34	27	9	0	0	2
Tungro	mean	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0
	no. of fields	21	12	5	2	0	1	34	27	9	0	0	2
						LEGEN	D						
Blue	font	5 to 10	% inci	dence o	fdiseas	ses, inse	ect pest	injuries o	r weed co	over or 5	i to 10 ir	nsects.	
Red f	ont	> 10 %	incide	nce of d	iseases	, insect	pest ini	uries or w	eed cove	er or > 10) insects	s.	

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

Region I				2019						202	0		
Ilocos Norte		JAN	FEB	MAR	APR	мау	JUN	JAN	FEB	MAR	APR	мау	JUN
E. INSECT CO	UNT												
Brown	mean	0.1	0.1	0.2	0.4	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
planthopper	median	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.8	0.6	0.7	0.4	0.0	0.0	0.3	0.2	0.5	0.0	0.0	0.0
	no. of fields	21	12	5	2	0	1	34	27	9	0	0	2
Green	mean	0.1	0.1	0.5	0.6	0.0	0.0	0.1	0.1	0.3	0.0	0.0	0.0
leafhopper	median	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
	maximum	0.8	0.8	1.3	0.7	0.0	0.0	0.5	0.5	0.8	0.0	0.0	0.0
	no. of fields	21	12	5	2	0	1	34	27	9	0	0	2
Rice black	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
bug	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	21	12	5	2	0	1	34	27	9	0	0	2
Rice bug	mean	0.2	0.7	0.4	3.0	0.0	0.0	0.3	0.6	0.3	0.0	0.0	0.0
	median	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	1.0	7.7	1.0	3.3	0.0	0.0	2.3	3.0	1.0	0.0	0.0	0.0
	no. of fields	21	12	5	2	0	1	34	27	9	0	0	2
Rice grain	mean	0.1	0.1	0.1	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
bug	median	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	1.2	0.7	0.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	no. of fields	21	12	5	2	0	1	34	27	9	0	0	2
F. RAT	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
INJURY	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	21	12	5	2	0	1	34	27	9	0	0	2
G. WEED	mean	2.2	2.1	10.0	2.5	0.0	0.0	1.7	0.3	5.0	0.0	0.0	0.0
COVER	median	0.0	0.0	3.3	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	20.0	18.3	36.7	3.3	0.0	0.0	36.7	5.0	30.0	0.0	0.0	0.0
	no. of fields	21	12	5	2	0	1	34	27	9	0	0	2
						GEND							
Blue f	ont	5 to 10 %	6 inciden	ice of dis	eases,	insect p	oest inj	uries or v	veed co	over or 5	to 10 in	sects.	
Red f	ont	> 10 % ir	ncidence	of disea	ses, ins	sect pes	t injuri	es or wee	ed cove	r or > 10	insects	i.	

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

Region I				201	.9					202	0		
Ilocos Sur		JAN	FEB	MAR	APR	MAY	JUN	JAN	FEB	MAR	APR	мау	JUN
A. FOLIAR	DISEASES											, i	
Bacterial	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
leaf blight	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	0.4	1.8	0.0	0.0	0.0	0.0
	no. of fields	13	5	1	0	0	1	13	8	1	0	0	5
Bacterial	mean	0.1	0.2	0.0	0.0	0.0	0.0	0.3	1.2	0.0	0.0	0.0	0.0
leaf streak	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	1.0	0.8	0.0	0.0	0.0	0.0	2.7	7.2	0.0	0.0	0.0	0.0
	no. of fields	13	5	1	0	0	1	13	8	1	0	0	5
Brown	mean	6.3	0.2	2.9	0.0	0.0	0.0	2.4	2.9	1.1	0.0	0.0	0.0
spot	median	0.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0
	maximum	29.5	0.7	2.9	0.0	0.0	0.0	11.9	19.4	1.1	0.0	0.0	0.0
	no. of fields	13	5	1	0	0	1	13	8	1	0	0	5
Leaf blast	mean	0.4	0.0	0.0	0.0	0.0	0.0	0.6	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	3.2	0.0	0.0	0.0	0.0	0.0	5.7	2.4	0.0	0.0	0.0	0.0
	no. of fields	13	5	1	0	0	1	13	8	1	0	0	5
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	13	5	1	0	0	1	13	8	1	0	0	5
B. DISEASE	OR PEST I	NJURY O		ERS									
Deadheart	mean	0.0	0.7	0.0	0.0	0.0	0.0	0.1	0.7	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	3.7	0.0	0.0	0.0	0.0	0.9	2.9	0.0	0.0	0.0	0.0
	no. of fields	13	5	1	0	0	1	13	8	1	0	0	5
Sheath	mean	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.7	0.0	0.0	0.0	0.0
blight	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	2.0	5.9	0.0	0.0	0.0	0.0
	no. of fields	13	5	1	0	0	1	13	8	1	0	0	5
						LEGEN	D						
Blue	font	5 to 10 %	6 incide	ence of o	disease			juries or v	weed cov	er or 5 t	o 10 ins	ects.	
Red	font	> 10 % ir	ncidenc	e of dis	eases, i	nsect pe	est inju	ies or we	ed cover	or > 10 i	nsects.		

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

Region I				20	19					202)		
Ilocos Sur		JAN	FEB	MAR	APR	MAY	JUN	JAN	FEB	MAR	APR	MAY	JUN
C. DISEASE (OR PEST IN	JURY O	N PANI	CLES									
Neck blast	mean	0.4	0.0	0.0	0.0	0.0	0.0	0.0	2.9	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	2.5	0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0	0.0	0.0
	no. of fields	6	4	1	0	0	0	5	7	1	0	0	0
Whitehead	mean	0.9	0.0	2.3	0.0	0.0	0.0	7.2	1.8	2.1	0.0	0.0	0.0
	median	0.5	0.0	2.3	0.0	0.0	0.0	5.7	0.0	2.1	0.0	0.0	0.0
	maximum	3.3	0.0	2.3	0.0	0.0	0.0	21.3	6.6	2.1	0.0	0.0	0.0
	no. of fields	6	4	1	0	0	0	5	7	1	0	0	0
D. SYSTEMIC	DISEASE	R PEST	INJUR	Y									
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	13	5	1	0	0	1	13	8	1	0	0	5
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	13	5	1	0	0	1	13	8	1	0	0	5
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	13	5	1	0	0	1	13	8	1	0	0	5
						LEGEN	D						
Blue	font	5 to 10	% inci	dence o	fdiseas	es, inse	ect pest	injuries o	r weed co	over or 5	i to 10 ir	nsects.	
Red f	ont	> 10 %	incide	nce of d	iseases	, insect	pest ini	uries or w	eed cove	er or > 10) insects	s.	

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

Region I				20	19					20	20		
Ilocos Sur		JAN	FEB	MAR	APR	MAY	JUN	JAN	FEB	MAR	APR	МАУ	JUN
E. INSECT CO	UNT												
Brown	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
planthopper	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	0.3	0.0	0.0	0.0	0.0
	no. of fields	13	5	1	0	0	1	13	8	1	0	0	5
Green	mean	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
leafhopper	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	0.2	0.0	0.0	0.0	0.0	0.0	1.5	0.2	0.0	0.0	0.0	0.0
	no. of fields	13	5	1	0	0	1	13	8	1	0	0	5
Rice black	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
bug	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	13	5	1	0	0	1	13	8	1	0	0	5
Rice bug	mean	0.2	0.1	0.0	0.0	0.0	0.0	0.7	0.5	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	1.0	0.7	0.0	0.0	0.0	0.0	2.7	2.0	0.0	0.0	0.0	0.0
	no. of fields	13	5	1	0	0	1	13	8	1	0	0	5
Rice grain	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
bug	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	13	5	1	0	0	1	13	8	1	0	0	5
F. RAT	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
INJURY	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	13	5	1	0	0	1	13	8	1	0	0	5
G. WEED	mean	1.2	1.3	3.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
	median	0.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	5.0	5.0	3.3	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0
	no. of fields	13	5	1	0	0	1	13	8	1	0	0	5
					L	EGEND							
Blue f	ont	5 to 10	% incid	lence of	disease	s, insec	t pest in	ijuries o	r weed	cover or	5 to 10 i	nsects.	
Red f	ont	> 10 %	incider	ce of dis	seases,	insect p	est inju	ries or v	veed cov	/er or > :	10 insect	ts.	

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

Region I				2	019					2020)		
La Union		JAN	FEB	MAR	APR	MAY	JUN	JAN	FEB	MAR	APR	мау	JUN
A. FOLIAR	DISEASES												
Bacterial	mean	0.1	0.1	0.0	0.3	0.3	0.0	0.0	0.1	0.2	0.0	0.0	0.0
leaf blight	median	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.6	0.6	0.0	1.3	0.9	0.0	0.3	1.0	1.0	0.0	0.0	0.0
	no. of fields	10	6	6	5	4	2	17	17	5	0	0	C
Bacterial	mean	0.8	0.4	0.0	0.6	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
leaf streak	median	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	6.2	1.3	0.0	1.7	0.0	0.0	0.7	0.2	0.0	0.0	0.0	0.0
	no. of fields	10	6	6	5	4	2	17	17	5	0	0	C
Brown	mean	0.1	0.3	3.1	6.4	25.5	49.7	0.3	2.5	0.0	0.0	0.0	0.0
spot	median	0.0	0.1	0.1	3.9	16.3	49.7	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.8	1.5	14.6	14.0	59.0	71.9	1.9	20.8	0.0	0.0	0.0	0.0
	no. of fields	10	6	6	5	4	2	17	17	5	0	0	C
Leaf blast	mean	0.9	0.4	0.4	2.1	0.4	2.9	3.9	6.8	7.4	0.0	0.0	0.0
	median	0.0	0.1	0.0	0.1	0.1	2.9	0.0	0.0	10.1	0.0	0.0	0.0
	maximum	6.1	1.6	1.9	10.0	1.2	5.4	44.1	63.6	12.9	0.0	0.0	0.0
	no. of fields	10	6	6	5	4	2	17	17	5	0	0	C
Red stripe	mean	0.0	0.0	0.9	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	5.5	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
	no. of fields	10	6	6	5	4	2	17	17	5	0	0	C
B. DISEASE	OR PEST I	NJURY	ON TIL	LERS									
Deadheart	mean	0.2	0.5	0.0	0.5	0.0	0.0	0.5	0.7	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	1.7	2.1	0.0	1.3	0.0	0.0	3.8	8.7	1.3	0.0	0.0	0.0
	no. of fields	10	6	6	5	4	2	17	17	5	0	0	(
Sheath	mean	0.3	0.8	0.1	3.5	8.1	7.3	0.0	0.0	0.0	0.0	0.0	0.0
blight	median	0.0	0.0	0.0	0.0	7.2	7.3	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	3.1	4.7	0.4	16.0	18.3	11.3	0.0	0.0	0.0	0.0	0.0	0.0
	no. of fields	10	6	6	5	4	2	17	17	5	0	0	C
						LEGEN							
Blue	font	5 to 10) % inci	dence of	disease	s, insect	pest inju	ries or w	eed cove	er or 5 to	10 inse	ects.	

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

Region I				20	19					20	20		
La Union		JAN	FEB	MAR	APR	МАУ	JUN	JAN	FEB	MAR	APR	MAY	JUN
C. DISEASE	OR PEST IN	JURY O		CLES									
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	0.0	0.0	0.0	0.0
	no. of fields	3	1	2	1	2	2	7	10	1	0	0	0
Whitehead	mean	1.1	0.0	1.8	0.0	1.3	0.5	2.7	0.3	1.2	0.0	0.0	0.0
	median	0.0	0.0	1.8	0.0	1.3	0.5	1.5	0.0	1.2	0.0	0.0	0.0
	maximum	3.2	0.0	3.7	0.0	1.8	0.7	6.7	2.8	1.2	0.0	0.0	0.0
	no. of fields	3	1	2	1	2	2	7	10	1	0	0	0
D. SYSTEMIC	DISEASE	R PEST	INJUR	Y									
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	10	6	6	5	4	2	17	17	5	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	10	6	6	5	4	2	17	17	5	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	10	6	6	5	4	2	17	17	5	0	0	C
					L	EGEND							
Blue	font	5 to 10	% incid	lence of	disease	es, insec	t pest ir	ijuries o	r weed	cover or	5 to 10 i	nsects.	
Red f	ont	> 10 %	incider	nce of dis	seases,	insect p	est inju	ries or v	veed co	ver or > 1	L0 insect	s.	

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

Region I				201	9			2020						
La Union		JAN	FEB	MAR	APR	MAY	JUN	JAN	FEB	MAR	APR	мау	JUN	
E. INSECT CO	E. INSECT COUNT		, i				· · ·	, i						
Brown planthopper	mean	0.1	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	
	median	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	maximum	0.7	0.0	0.5	0.8	0.0	0.0	0.1	0.3	0.4	0.0	0.0	0.0	
	no. of fields	10	6	6	5	4	2	17	17	5	0	0	0	
Green	mean	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.9	0.0	0.0	0.0	
leafhopper	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	
	maximum	0.3	0.0	0.4	0.1	0.0	0.0	0.7	0.3	1.9	0.0	0.0	0.0	
	no. of fields	10	6	6	5	4	2	17	17	5	0	0	0	
Rice black	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	
bug	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	0.2	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	10	6	6	5	4	2	17	17	5	0	0	0	
Rice bug	mean	0.6	0.0	0.0	0.0	0.1	0.3	0.1	0.1	0.0	0.0	0.0	0.0	
	median	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	
	maximum	2.7	0.0	0.0	0.0	0.3	0.7	1.7	1.7	0.0	0.0	0.0	0.0	
	no. of fields	10	6	6	5	4	2	17	17	5	0	0	0	
Rice grain	mean	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.3	0.0	0.0	0.0	0.0	
bug	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	0.2	0.0	0.0	0.3	0.0	0.0	2.1	3.1	0.1	0.0	0.0	0.0	
	no. of fields	10	6	6	5	4	2	17	17	5	0	0	0	
F. RAT	mean	0.0	0.2	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
INJURY	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	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	no. of fields	10	6	6	5	4	2	17	17	5	0	0	0	
G. WEED	mean	0.2	4.2	7.5	1.7	0.0	0.0	2.3	3.3	5.0	0.0	0.0	0.0	
COVER	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	1.7	20.0	45.0	5.0	0.0	0.0	20.0	45.0	20.0	0.0	0.0	0.0	
	no. of fields	10	6	6	5	4	2	17	17	5	0	0	0	
					LI	EGEND								
Blue f	ont	5 to 10	% incide	ence of d	liseases	s, insec	t pest ir	ijuries or	weed co	over or 5	to 10 in	sects.		
Red font		> 10 %	inciden	ce of dise	eases, i	nsect p	est inju	ries or we	eed cove	r or > 10	insects			

Annex 10. Incidence of diseases or pest injuries during the previous 1st semesters.

Region I				20	19			2020						
Pangasina	n	JAN	FEB	MAR	APR	МАУ	JUN	JAN	FEB	MAR	APR	мау	JUN	
A. FOLIAR	DISEASES			· · · ·	· · · ·		·					·		
Bacterial	mean	4.2	2.1	2.3	2.0	1.5	0.8	1.6	1.5	1.5	0.0	0.0	0.6	
leaf blight	median	2.5	1.5	1.6	0.0	0.0	0.0	0.7	1.3	1.2	0.0	0.0	0.3	
	maximum	22.4	10.4	8.8	7.8	12.3	11.4	13.1	5.8	6.7	0.0	0.0	1.4	
	no. of fields	31	28	21	6	9	18	24	22	15	0	0	3	
Bacterial	mean	0.2	0.2	0.0	0.0	0.0	0.0	0.3	0.0	0.1	0.0	0.0	0.5	
leaf streak	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	2.7	3.1	0.0	0.2	0.0	0.0	7.6	0.2	1.2	0.0	0.0	1.6	
	no. of fields	31	28	21	6	9	18	24	22	15	0	0	3	
Brown	mean	0.8	1.1	1.3	3.0	0.6	1.3	0.8	0.8	1.0	0.0	0.0	3.8	
spot	median	0.1	0.6	0.0	0.0	0.0	0.0	0.0	0.7	1.0	0.0	0.0	0.2	
	maximum	8.6	10.0	7.6	17.8	5.4	21.9	8.2	4.7	2.5	0.0	0.0	11.3	
	no. of fields	31	28	21	6	9	18	24	22	15	0	0	3	
Leaf blast	mean	0.1	0.1	0.0	0.0	0.0	0.3	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	1.5	1.6	0.0	0.0	0.0	5.0	1.5	0.0	0.1	0.0	0.0	0.0	
	no. of fields	31	28	21	6	9	18	24	22	15	0	0	3	
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	0.2	0.0	0.0	0.0	0.0	0.0	0.0	
	no. of fields	31	28	21	6	9	18	24	22	15	0	0	3	
B. DISEASE	OR PEST I	NJURY O		RS										
Deadheart	mean	0.4	0.5	0.9	0.0	0.2	0.5	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	3.3	3.8	4.9	0.0	2.2	8.3	1.4	1.0	0.0	0.0	0.0	0.0	
	no. of fields	31	28	21	6	9	18	24	22	15	0	0	3	
Sheath	mean	0.0	0.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
blight	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	0.8	1.7	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	no. of fields	31	28	21	6	9	18	24	22	15	0	0	3	
					L	EGEND								
Blue	font	5 to 10 %	6 incide	nce of d			est iniuri	es or we	ed cove	er or 5 t	o 10 in	sects		

Annex 11. Incidence of diseases or pest injuries during the previous 1st semesters.

Region I			2019							2020						
Pangasinan		JAN	FEB	MAR	APR	MAY	JUN	JAN	FEB	MAR	APR	МАУ	JUN			
C. DISEASE	OR PEST IN	JURY ON	PANICL	ES												
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	0.0	0.0	0.0	0.0			
	no. of fields	5	18	14	3	2	2	5	13	13	0	0	1			
Whitehead	mean	5.6	1.2	0.7	6.7	0.3	3.9	2.5	0.0	3.5	0.0	0.0	1.3			
	median	3.2	0.0	0.0	0.0	0.3	3.9	0.0	0.0	2.0	0.0	0.0	1.3			
	maximum	15.9	15.7	2.9	20.0	0.7	7.9	10.4	0.0	17.9	0.0	0.0	1.3			
	no. of fields	5	18	14	3	2	2	5	13	13	0	0	1			
D. SYSTEMIC	DISEASE	R PEST I	NJURY													
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	31	28	21	6	9	18	24	22	15	0	0	3			
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	31	28	21	6	9	18	24	22	15	0	0	3			
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	31	28	21	6	9	18	24	22	15	0	0	3			
					LE	GEND										
Blue	font	5 to 10 %	6 incide	nce of d	iseases,	insect	oest inju	uries or v	veed co	over or 5	to 10 in	sects.				
Red f	ont	> 10 % ir	ncidence	e of dise	ases, ins	sect pes	st injurie	es or wee	ed cove	r or > 10	insects	i.				

Annex 12. Incidence of pest injuries, count of insect pests, and percentage of weed cover during the previous 1st semesters.

Region I				20	19			2020						
Pangasinan	Pangasinan		FEB	MAR	APR	MAY	JUN	JAN	FEB	MAR	APR	мау	JUN	
E. INSECT COUNT														
Brown planthopper	mean	0.0	0.0	0.2	0.9	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	0.2	0.2	3.1	5.4	0.0	0.2	0.7	1.2	1.4	0.0	0.0	0.0	
	no. of fields	31	28	21	6	9	18	24	22	15	0	0	3	
Green	mean	0.0	0.1	0.0	0.2	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	
leafhopper	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	0.4	0.3	0.4	0.8	0.5	0.3	0.5	0.4	0.4	0.0	0.0	0.0	
	no. of fields	31	28	21	6	9	18	24	22	15	0	0	3	
Rice black	mean	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
bug	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	3.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	no. of fields	31	28	21	6	9	18	24	22	15	0	0	3	
Rice bug	mean	0.1	0.1	0.2	0.0	0.3	0.3	0.3	0.1	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	2.3	1.0	2.0	0.0	3.0	5.0	4.0	0.7	5.0	0.0	0.0	0.0	
	no. of fields	31	28	21	6	9	18	24	22	15	0	0	3	
Rice grain	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	
bug	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	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	no. of fields	31	28	21	6	9	18	24	22	15	0	0	3	
F. RAT	mean	0.0	0.1	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
INJURY	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	1.0	3.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	no. of fields	31	28	21	6	9	18	24	22	15	0	0	3	
G. WEED	mean	2.4	1.3	1.7	0.6	0.6	3.2	2.2	1.4	3.2	0.0	0.0	11.7	
COVER	median	0.0	0.0	0.0	0.0	0.0	2.5	0.0	0.0	1.7	0.0	0.0	15.0	
	maximum	45.0	5.0	5.0	1.7	3.3	15.0	20.0	5.0	20.0	0.0	0.0	20.0	
	no. of fields	31	28	21	6	9	18	24	22	15	0	0	3	
				-		LEGENI								
Blue							ct pest in							
Red f	ont	> 10 % i	nciden	ce of di	seases,	insect	pest inju	ries or w	eed cov	ver or > 1	0 insec	ts.		