

PRE-SEMESTER BULLETIN

December 2020

REGION II - CAGAYAN VALLEY



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.

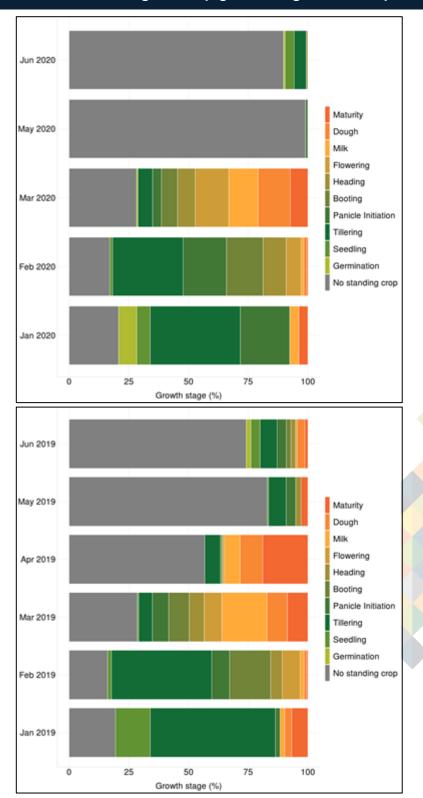


TABLE 2. Commonly planted varieties in the region for the 1st semesters of 2019 and 2020.

2019 Semester 1	2020 Semester 1
NSIC Rc132H	NSIC Rc132H
NSIC Rc222	NSIC Rc222
	NSIC Rc216
Based on 108 monitoring fields	
	Based on 37 monitoring fields



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





Monitored fields and data collectors

Municipalities surveyed

Cagayan: Amulung, Ballesteros, Buguey, and Claveria

Isabela: Cabatuan, Cauayan City, Roxas, and Santiago City

Nueva Vizcaya: Solano, and Villaverde

Quirino: Diffun

Monitoring date

January 2020 - June 2020

Number of monitoring fields

193

Data collectors

Arnold Masin, Hilierima E Miguel, Joneline Bag-oyen, Leonor Campoy, and Wilbert Crisologo

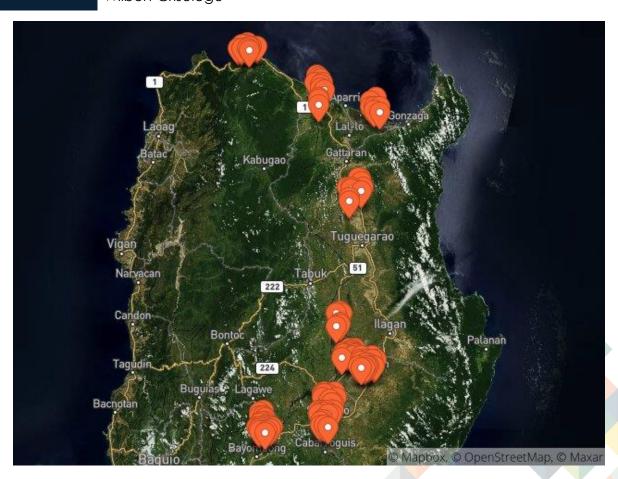


FIGURE 2. Monitored barangays in Region II from January 2020 to June 2020. Each barangay is represented by 1 marker.



Municipalities surveyed

Cagayan: Amulung, Ballesteros, Buguey, and Claveria

Isabela: Cabatuan, Cauayan City, Roxas, and Santiago City

Nueva Vizcaya: Solano, and Villaverde

Quirino: Diffun

Monitoring date

January 2019 - June 2019

Number of monitoring fields

201

Data collectors

Aida Maramag, Arnold Masin, Demetrio Batuon, Eloisa Milla, Ferdinand Enriquez, Joneline Bag-oyen, Thomas Ibarra, and Wilbert Crisologo

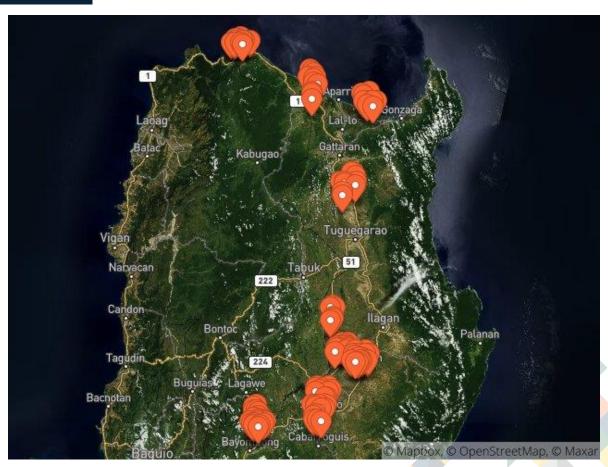


FIGURE 3. Monitored barangays in Region II from January 2019 to June 2019. Each barangay is represented by 1 marker.



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

Region II			202	0		
	JAN	FEB	MAR	APR	MAY	JUN
A. FOLIAR DISEASES						
Bacterial leaf blight	0.1	0.5	0.5	0	0.0	0.6
Bacterial leaf streak	0.1	0.3	0.7	0	0.0	0.0
Brown spot	0.4	0.2	0.0	0	0.0	0.0
Leaf blast	0.3	0.4	0.2	0	0.0	0.3
Red stripe	0.0	0.1	0.0	0	0.0	0.0
B. DISEASE OR PEST INJURY	ON TILLERS					
Deadheart	0.1	0.1	0.2	0	0.0	0.0
Sheath blight	0.0	0.0	0.0	0	0.0	0.0
C. DISEASE OR PEST INJURY	ON PANICLES					
Neck blast	0.0	0.0	0.2	0	0	0.0
Whitehead	0.2	0.0	1.3	0	0	0.0
D. SYSTEMIC DISEASE OR PE	ST INJURY					
Bugburn	0.0	0.0	0.0	0	0.0	0.0
Hopperburn	0.0	0.0	0.0	0	0.0	0.0
Tungro	0.0	0.0	0.0	0	0.0	0.0
E. INSECT COUNT						
Brown planthopper	0.0	0.0	0.0	0	0.0	0.0
Green leafhopper	0.1	0.0	0.0	0	0.0	0.0
Rice black bug	0.4	0.1	0.0	0	0.0	0.1
Rice bug	0.2	0.1	0.1	0	0.0	0.2
Rice grain bug	0.0	0.0	0.0	0	0.0	0.0
F. RAT INJURY	0.1	0.1	0.0	0	0.0	0.0
G. WEED COVER	0.4	0.6	0.4	0	0.0	0.0

Mean of all monitoring fields.

LEGEND

1-5 % or 1-5 insects

>5 % or >5 insects



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

Region II			201	9		
	JAN	FEB	MAR	APR	MAY	JUN
A. FOLIAR DISEASES						
Bacterial leaf blight	0.0	0.3	0.8	2.1	0.2	0.1
Bacterial leaf streak	0.0	0.5	0.2	0.9	0.1	0.1
Brown spot	0.0	0.6	1.0	2.4	0.4	0.3
Leaf blast	0.1	0.4	0.3	0.5	0.3	0.2
Red stripe	0.0	0.1	0.1	0.1	0.0	0.0
B. DISEASE OR PEST INJU	RY ON TILLERS					
Deadheart	0.0	0.3	0.5	1.6	0.2	0.2
Sheath blight	0.0	0.1	0.1	1.5	0.2	0.0
C. DISEASE OR PEST INJU	RY ON PANICLES					
Neck blast	0.0	0.0	0.2	1.0	1.0	0.0
Whitehead	2.0	0.1	1.4	0.9	1.3	2.5
D. SYSTEMIC DISEASE OR	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	0.4	0.3	0.0	0.0
Green leafhopper	0.0	0.0	0.1	0.1	0.1	0.0
Rice black bug	0.0	0.1	0.1	0.1	0.4	0.0
Rice bug	0.1	0.2	0.2	0.6	1.1	1.2
Rice grain bug	0.0	0.0	0.0	0.0	0.0	0.0
F. RAT INJURY	0.0	0.1	0.0	0.1	0.0	0.0
G. WEED COVER	0.0	0.8	0.9	1.1	0.1	0.5

Mean of all monitoring fields.

LEGEND

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

- 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.
- 9. 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 ratooning because the pathogen can survive on ratoon.
- 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%.

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 II				201	.9					202	0		
Cagayan		JAN	FEB	MAR	APR	MAY	JUN	JAN	FEB	MAR	APR	MAY	JUN
A. FOLIAR	DISEASES												
Bacterial	mean	0.0	0.5	2.4	3.8	1.4	0.4	0.1	0.7	2.1	0.0	0.0	0.1
leaf blight	median	0.0	0.0	1.3	2.3	0.4	0.0	0.0	0.0	1.0	0.0	0.0	0.0
	maximum	0.0	6.8	11.2	15.2	4.8	1.8	0.3	6.9	8.5	0.0	0.0	0.3
	no. of fields	4	55	42	39	4	6	6	39	23	0	0	10
Bacterial	mean	0.0	0.6	0.6	1.6	0.4	0.0	0.7	0.7	3.3	0.0	0.0	0.0
leaf streak	median	0.0	0.0	0.0	0.1	0.3	0.0	0.4	0.0	0.3	0.0	0.0	0.0
	maximum	0.0	4.8	7.3	17.0	1.1	0.0	2.0	10.1	20.1	0.0	0.0	0.0
	no. of fields	4	55	42	39	4	6	6	39	23	0	0	10
Brown	mean	0.0	1.3	2.1	4.3	2.9	1.2	0.0	0.3	0.0	0.0	0.0	0.0
spot	median	0.0	0.0	1.2	1.8	2.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	19.7	10.9	17.9	6.3	2.8	0.0	6.2	0.2	0.0	0.0	0.3
	no. of fields	4	55	42	39	4	6	6	39	23	0	0	10
Leaf blast	mean	0.0	0.5	0.5	1.0	2.2	0.5	1.6	0.4	0.8	0.0	0.0	0.5
	median	0.0	0.0	0.0	0.6	1.1	0.0	0.0	0.0	0.2	0.0	0.0	0.0
	maximum	0.0	4.6	4.1	5.0	6.6	2.7	9.8	2.9	4.9	0.0	0.0	4.5
	no. of fields	4	55	42	39	4	6	6	39	23	0	0	10
Red stripe	mean	0.0	0.2	0.4	0.2	0.0	0.0	0.0	0.3	0.0	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	0.0	3.2	3.7	1.5	0.0	0.0	0.0	9.2	0.4	0.0	0.0	0.0
	no. of fields	4	55	42	39	4	6	6	39	23	0	0	10
B. DISEASE	OR PEST I	NJURY	ON TILLI	ERS									
Deadheart	mean	0.0	0.2	1.1	3.0	1.0	0.4	0.8	0.5	0.7	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.8	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	4.8	7.9	41.2	1.9	2.3	4.5	10.0	5.0	0.0	0.0	0.0
	no. of fields	4	55	42	39	4	6	6	39	23	0	0	10
Sheath	mean	0.0	0.2	0.2	2.8	1.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0
blight	median	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	7.3	2.8	18.6	2.8	0.0	0.0	0.8	1.8	0.0	0.0	0.0
	no. of fields	4	55	42	39	4	6	6	39	23	0	0	10
					LI	EGEND							
Blue	font	5 to 10	% incide	nce of di	seases, i	nsect p	est inju	ries or v	weed cov	er or 5 to	o 10 inse	ects.	
Red	font	> 10 %	incidenc	e of dise	ases, ins	ect pest	injurie	s or we	ed cover	or > 10 ir	nsects.		



Region II				20	019					20	20		
Cagayan		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	0.0	0.0	0.0	1.5	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	0.8	16.8	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	no. of fields	1	1	21	38	4	0	1	1	9	0	0	0
Whitehead	mean	0.0	0.0	0.6	1.4	2.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	4.2	10.0	5.9	0.0	0.0	0.0	1.4	0.0	0.0	0.0
	no. of fields	1	1	21	38	4	0	1	1	9	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
lugburn	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	4	55	42	39	4	6	6	39	23	0	0	10
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	4	55	42	39	4	6	6	39	23	0	0	10
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	4	55	42	39	4	6	6	39	23	0	0	10
					LE	EGEND							
Blue	font	5 to 10	% incid	dence of	diseases	, insect	pest inj	uries or	weed o	over or	5 to 10 i	nsects.	
Red f	ont	> 10 %	incide	nce of di	seases, ir	sect pe	st injuri	ies or w	eed cov	er or > 1	0 insect	s.	

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

Region II				201	9					202	0		
Cagayan		JAN	FEB	MAR	APR	MAY	JUN	JAN	FEB	MAR	APR	мач	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	0.1	0.0	0.0	0.0
	no. of fields	4	55	42	39	4	6	6	39	23	0	0	10
Green	mean	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
leafhopper	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	0.0	0.9	0.4	1.1	0.0	0.0	0.0	0.3	0.1	0.0	0.0	0.0
	no. of fields	4	55	42	39	4	6	6	39	23	0	0	10
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	1.8	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	no. of fields	4	55	42	39	4	6	6	39	23	0	0	10
Rice bug	mean	0.0	0.2	0.3	1.0	3.3	0.0	0.4	0.1	0.0	0.0	0.0	0.0
	median	0.0	0.0	0.0	0.7	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	3.3	2.0	3.7	6.0	0.0	2.3	2.3	0.0	0.0	0.0	0.0
	no. of fields	4	55	42	39	4	6	6	39	23	0	0	10
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	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	no. of fields	4	55	42	39	4	6	6	39	23	0	0	10
F. RAT	mean	0.0	0.2	0.1	0.2	0.0	0.0	0.6	0.4	0.1	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	1.0	1.0	0.0	0.0	3.5	3.5	1.0	0.0	0.0	0.0
	no. of fields	4	55	42	39	4	6	6	39	23	0	0	10
G. WEED	mean	0.0	1.5	2.3	1.8	0.4	1.1	2.5	1.8	1.2	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	0.0	15.0	20.0	20.0	1.7	5.0	10.0	36.7	5.0	0.0	0.0	0.0
	no. of fields	4	55	42	39	4	6	6	39	23	0	0	10
					LE	GEND							
Blue f	ont	5 to 10	% incide	ence of d	liseases,	insect	pest inj	uries or v	veed cov	er or 5	to 10 in	sects.	
Red f	ont							es or wee					

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

Region II				20	19					20	20		
Isabela		JAN	FEB	MAR	APR	MAY	JUN	JAN	FEB	MAR	APR	MAY	JUN
A. FOLIAR	DISEASES												
Bacterial	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
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	1.1	0.0	1.4	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0
	no. of fields	64	74	55	10	0	5	24	79	66	0	0	2
Bacterial	mean	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	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	1.2	7.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	no. of fields	64	74	55	10	0	5	24	79	66	0	0	2
Brown	mean	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
spot	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	3.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	no. of fields	64	74	55	10	0	5	24	79	66	0	0	2
Leaf blast	mean	0.1	0.3	0.1	0.0	0.0	0.0	0.0	0.3	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	1.5	8.5	2.1	0.0	0.0	0.0	0.6	3.3	2.0	0.0	0.0	0.0
	no. of fields	64	74	55	10	0	5	24	79	66	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	64	74	55	10	0	5	24	79	66	0	0	2
B. DISEASE	OR PEST I	NJURY	ON TILL	ERS.									
Deadheart	mean	0.0	0.0	0.1	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	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	no. of fields	64	74	55	10	0	5	24	79	66	0	0	2
Sheath	mean	0.0	0.0	0.1	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	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	no. of fields	64	74	55	10	0	5	24	79	66	0	0	2
						LEGENI	D						
Blue	font	5 to 10	% incid	ence of	disease	s, insect	pest inj	uries or	weed co	over or 5	to 10 in:	sects.	
Red	font	> 10 %	inciden	ce of dis	eases, i	nsect pe	st injuri	es or we	eed cove	er or > 10	insects.		



Region II				20:	19					20:	20		
Isabela		JAN	FEB	MAR	APR	MAY	JUN	JAN	FEB	MAR	APR	MAY	JUN
C. DISEASE O	OR PEST IN	JURY O	PANIC	CLES									
Neck blast	mean	0.0	0.0	0.4	0.3	0.0	0.0	0.0	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	6.4	2.7	0.0	0.0	0.0	0.0	7.1	0.0	0.0	0.0
	no. of fields	0	19	50	10	0	0	0	22	60	0	0	0
Whitehead	mean	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0
	median	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	maximum	0.0	0.0	8.1	0.0	0.0	0.0	0.0	0.0	11.4	0.0	0.0	0.0
	no. of fields	0	19	50	10	0	0	0	22	60	0	0	0
D. SYSTEMIC	DISEASE C	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
ougoum	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	64	74	55	10	0	5	24	79	66	0	0	2
Hopperburn	mean	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0
	no. of fields	64	74	55	10	0	5	24	79	66	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	64	74	55	10	0	5	24	79	66	0	0	2
					ı	LEGEND)						
Blue	font	5 to 10	% incid	lence of	disease	es, insec	t pest i	njuries (or weed	cover or	5 to 10 i	nsects.	
Red f	ont	> 10 %	inciden	ce of dis	seases,	insect p	est inju	ries or	weed co	ver or > 1	0 insect	s.	

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

Region II				20:	19					20	20		
Isabela		JAN	FEB	MAR	APR	MAY	JUN	JAN	FEB	MAR	APR	мау	JUN
E. INSECT CO	DUNT									·			
Brown	mean	0.0	0.0	0.9	1.8	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	14.2	14.3	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0
	no. of fields	64	74	55	10	0	5	24	79	66	0	0	2
Green	mean	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1	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 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0
	maximum	0.0	0.3	0.6	0.3	0.0	0.0	0.3	0.4	0.4	0.0	0.0	0.0
	no. of fields	64	74	55	10	0	5	24	79	66	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	0.0	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	64	74	55	10	0	5	24	79	66	0	0	:
Rice 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	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	no. of fields	64	74	55	10	0	5	24	79	66	0	0	2
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	64	74	55	10	0	5	24	79	66	0	0	2
F. RAT	mean	0.0	0.1	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	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	no. of fields	64	74	55	10	0	5	24	79	66	0	0	:
G. WEED	mean	0.0	0.4	0.4	0.0	0.0	0.0	0.1	0.2	0.1	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	6.7	5.0	0.0	0.0	0.0	1.7	3.3	3.3	0.0	0.0	0.0
	no. of fields	64	74	55	10	0	5	24	79	66	0	0	:
					LEG	GEND							
Blue f	ont	5 to 10	% incid	lence of d	liseases,	insect p	est inju	uries or	weed c	over or !	5 to 10 i	nsects.	
Red font 5 to 10 % incidence of diseases, insect pest injuries or weed on > 10 % incidence of diseases, insect pest injuries or weed on									eed cov	er or > 1	0 insect	s.	



Region II				201	.9					202	0		
Nueva Vizo	caya	JAN	FEB	MAR	APR	MAY	JUN	JAN	FEB	MAR	APR	MAY	JUN
A. FOLIAR	DISEASES			·									
Bacterial	mean	0.0	0.5	0.0	0.0	0.0	0.0	0.5	3.6	0.0	0.0	0.0	3.0
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	3.3	0.0	0.0	0.2	0.0	4.3	32.6	0.0	0.0	0.0	8.8
	no. of fields	15	7	11	15	26	26	8	9	8	0	1	3
Bacterial	mean	0.0	3.5	0.0	0.1	0.0	0.1	0.0	0.0	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	0.0	24.4	0.0	0.8	0.8	2.3	0.0	0.0	0.0	0.0	0.0	0.0
	no. of fields	15	7	11	15	26	26	8	9	8	0	1	3
Brown	mean	0.1	1.3	2.7	0.8	0.0	0.2	1.9	1.8	0.0	0.0	0.0	0.0
spot	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	9.1	18.3	11.6	0.7	4.9	14.8	15.9	0.0	0.0	0.0	0.0
	no. of fields	15	7	11	15	26	26	8	9	8	0	1	3
Leaf blast	mean	0.0	0.0	0.0	0.0	0.0	0.1	0.0	1.1	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	3.2	0.0	9.5	0.8	0.0	0.0	0.0
	no. of fields	15	7	11	15	26	26	8	9	8	0	1	3
Red stripe	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	0.7	0.0	0.0	0.0	0.0	0.0	0.0
	no. of fields	15	7	11	15	26	26	8	9	8	0	1	3
B. DISEASI	E OR PEST I	NJURY (ON TILL	ERS									
Deadheart	mean	0.1	0.8	0.0	0.0	0.1	0.2	0.1	0.0	0.7	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	4.9	0.0	0.0	1.4	3.8	0.8	0.0	3.0	0.0	0.0	0.0
	no. of fields	15	7	11	15	26	26	8	9	8	0	1	3
Sheath	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
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	0.0	0.0	0.0	0.0	0.0	0.0
	no. of fields	15	7	11	15	26	26	8	9	8	0	1	3
					L	EGEND							
Blue	font	5 to 10	% incide	ence of d				ries or w	eed cove	er or 5 to	o 10 inse	ects.	
Red	font	> 10 %	inciden	e of dise	ases, ins	sect pes	t iniurie	s or wee	d cover o	or > 10 ir	nsects.		



Region II				20	019					20	20		
Nueva Vizca	ya	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	0.0	0.0	0.0	0.0	0.2	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	1.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0
	no. of fields	6	2	4	4	5	11	3	3	5	0	0	1
Whitehead	mean	2.3	0.9	0.9	0.5	0.5	2.5	0.3	0.0	8.3	0.0	0.0	0.0
	median	0.0	0.9	0.7	0.0	0.0	0.0	0.0	0.0	5.8	0.0	0.0	0.0
	maximum	8.1	1.8	2.4	2.1	2.3	14.6	1.0	0.0	26.4	0.0	0.0	0.0
	no. of fields	6	2	4	4	5	11	3	3	5	0	0	1
D. SYSTEMIC	DISEASE C	R PEST	INJUR	Υ									
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	15	7	11	15	26	26	8	9	8	0	1	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	15	7	11	15	26	26	8	9	8	0	1	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	15	7	11	15	26	26	8	9	8	0	1	3
						LEGENI)						
Blue	font	5 to 10	% incid	dence of	diseas	es, inse	ct pest in	juries o	r weed	cover or 5	5 to 10 ii	nsects.	
Red f	ont	> 10 %	incider	nce of di	seases,	insect p	oest injur	ies or w	eed co	ver or > 1	0 insect	s.	

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

Region II				20	19					2020 MAR APR MAY JU					
Nueva Vizca	ya	JAN	FEB	MAR	APR	MAY	JUN	JAN	FEB	MAR	APR	MAY	JUN		
E. INSECT CO	UNT						· · · · ·								
Brown	mean	0.0	0.0	0.2	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	1.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0		
	no. of fields	15	7	11	15	26	26	8	9	8	0	1	3		
Green	mean	0.0	0.0	0.1	0.1	0.1	0.0	0.3	0.0	0.0	0.0	0.0	0.1		
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	0.0	0.0	1.1	1.0	1.8	0.0	2.5	0.0	0.0	0.0	0.0	0.4		
	no. of fields	15	7	11	15	26	26	8	9	8	0	1	3		
Rice black	mean	0.1	0.9	1.5	0.3	0.4	0.0	1.7	1.4	0.6	0.0	0.0	0.5		
bug	median	0.0	0.0	2.1	0.0	0.0	0.0	1.4	0.0	0.4	0.0	0.0	0.0		
	maximum	1.2	2.6	2.9	3.4	3.1	0.4	3.9	5.2	1.7	0.0	0.0	1.6		
	no. of fields	15	7	11	15	26	26	8	9	8	0	1	3		
Rice bug	mean	0.3	1.7	1.2	0.2	0.8	1.6	0.6	1.4	0.7	0.0	0.0	0.9		
	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	6.0	5.0	3.0	9.3	7.0	5.0	9.3	2.3	0.0	0.0	2.7		
	no. of fields	15	7	11	15	26	26	8	9	8	0	1	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	0.2	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	no. of fields	15	7	11	15	26	26	8	9	8	0	1	3		
F. RAT	mean	0.1	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	1.0	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	15	7	11	15	26	26	8	9	8	0	1	3		
G. WEED	mean	0.0	0.0	0.0	0.3	0.0	0.4	0.0	0.0	0.8	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	0.0	0.0	0.0	5.0	0.0	5.0	0.0	0.0	0 5.0 0.0 0.0	0.0				
	no. of fields	15	7	11	15	26	26	8	9	8	0	1	3		
					L	.EGEND									
Blue f	ont	5 to 10	% incid	lence of	disease	s, insec	t pest in	juries o	r weed	cover or	5 to 10	insects.			
Blue font 5 to 10 % incidence of diseases, insect pest injuries or week Red font > 10 % incidence of diseases, insect pest injuries or week										ver or > 1	10 insec	ts.			

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

Region II		2019								2020					
Quirino		JAN	FEB	MAR	APR	MAY	JUN	JAN	FEB	MAR	APR	MAY	JUN		
A. FOLIAR	DISEASES														
Bacterial leaf blight	mean	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.4	0.5	0.0	0.0	0.0		
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.0	0.0	0.0		
	maximum	0.0	0.7	0.3	0.3	0.0	0.0	0.0	1.0	1.2	0.0	0.0	0.0		
	no. of fields	0	20	17	9	0	0	0	18	19	0	0	0		
Bacterial leaf streak	mean	0.0	0.1	0.2	0.1	0.0	0.0	0.0	0.6	0.5	0.0	0.0	0.0		
	median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.5	0.0	0.0	0.0		
	maximum	0.0	0.7	1.1	0.3	0.0	0.0	0.0	1.5	1.8	0.0	0.0	0.0		
	no. of fields	0	20	17	9	0	0	0	18	19	0	0	0		
Brown	mean	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0		
spot	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	0.4	0.3	0.1	0.0	0.0	0.0	0.4	0.8	0.0	0.0	0.0		
	no. of fields	0	20	17	9	0	0	0	18	19	0	0	0		
Leaf blast	mean	0.0	0.5	0.2	0.0	0.0	0.0	0.0	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	0.1	0.0	0.0	0.0	0.0		
	maximum	0.0	4.1	1.0	0.1	0.0	0.0	0.0	1.6	0.2	0.0	0.0	0.0		
	no. of fields	0	20	17	9	0	0	0	18	19	0	0	0		
Red stripe	mean	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0		
	no. of fields	0	20	17	9	0	0	0	18	19	0	0	0		
B. DISEASI	E OR PEST I	NJURY	ON TILL	ERS											
Deadheart	mean	0.0	1.3	0.7	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	6.3	3.5	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	no. of fields	0	20	17	9	0	0	0	18	19	0	0	0		
Sheath	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		
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	0.0	0.0	0.0	0.0	0.0	0.0		
	no. of fields	0	20	17	9	0	0	0	18	19	0	0	0		
						LEGENI)								
Blue	font	5 to 10	% incid	ence of	disease			uries or	weed co	over or 5	to 10 ins	sects.			
Red font											insects.				



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

Region II		2019							2020						
Quirino		JAN	FEB	MAR	APR	MAY	JUN	JAN	FEB	MAR	APR	MAY	JUN		
C. DISEASE	OR PEST IN.	JURY O	PANIC	LES											
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	0	7	10	9	0	0	0	7	15	0	0	0		
Whitehead	mean	0.0	0.0	0.5	0.1	0.0	0.0	0.0	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	0.9	0.0	0.0	0.0		
	maximum	0.0	0.0	2.9	0.7	0.0	0.0	0.0	0.7	1.4	0.0	0.0	0.0		
	no. of fields	0	7	10	9	0	0	0	7	15	0	0	0		
D. SYSTEMIC	DISEASE	R PEST	INJUR	1											
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	20	17	9	0	0	0	18	19	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	20	17	9	0	0	0	18	19	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	20	17	9	0	0	0	18	19	0	0	0		
					L	.EGEND									
Blue	Blue font		5 to 10 % incidence of diseases, insect pest injuries or weed cover or 5 to 10 insects.												
Red f	ont	> 10 % incidence of diseases, insect pest injuries or weed cover or > 10 insects.													

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

Region II				20	19			2020					
Quirino		JAN	FEB	MAR	APR	MAY	JUN	JAN	FEB	MAR	APR	MAY	JUN
E. INSECT CO	UNT												
Brown planthopper	mean	0.0	0.0	0.1	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	0.3	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	no. of fields	0	20	17	9	0	0	0	18	19	0	0	(
Green	mean	0.0	0.1	0.0	0.0	0.0	0.0	0.0	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	0.0	0.4	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	no. of fields	0	20	17	9	0	0	0	18	19	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	0.0	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	20	17	9	0	0	0	18	19	0	0	(
Rice bug	mean	0.0	0.2	0.1	0.1	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	1.7	0.3	0.7	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.
	no. of fields	0	20	17	9	0	0	0	18	19	0	0	(
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	0	20	17	9	0	0	0	18	19	0	0	(
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	0	20	17	9	0	0	0	18	19	0	0	
G. WEED COVER	mean	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.2	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	1.7	1.7	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0
	no. of fields	0	20	17	9	0	0	0	18	19	0	0	(
					L	.EGEND							
Blue f	ont	5 to 10	% incid	lence of	disease	s, insec	t pest in	juries o	r weed	cover or	5 to 10	insects.	
Red f	ont	> 10 %	inciden	ce of di	seases,	insect p	est inju	ries or w	veed cov	ver or > 1	10 insec	ts.	