



Ministry of Agriculture, Livestock and Irrigation



Golden Apple Snail (GAS) Experiment (2017-2018)

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Golden Apple Snail Experimental Plot

1. Crops - Sinthwelat (Rice)
2. Experimental Design - RCB(5×4)
3. Village - KyoneTar
4. Township/District - Pyapon/Pyapon
5. Region - Ayeyarwady
6. Farmer's Name - U Mg Mg Thwin
7. Field No./Plot No. - 457A , 19/1
8. Small Plot Size - 20'× 20'

Golden Apple Snail And Pyapon District

GAS Infestation

2011 - Dedaye Township (Tamot Village)

2013 - Dedaye Township (Mosoon Rice)

2014-2015 - Pyapon and Kyikelat Township

2016 - Bogalay Township

2017-2018 - (10) Township of Ayeyarwady Region

Objectives

- (1) To achieve locally adaptable treatment for GAS
- (2) To control effectively using IPM
- (3) To know and follow the GAS control measure by farmers

Activities of the Experimental Plot

Treatment - (5)

T₁- Hand Picking

T₂- Use of Attractant feeds

T₃- Use of Pesticide

T₄- Using raised bed (Old Seedling)

T₅- Control

Replication - (4)

Preparation for Experiment



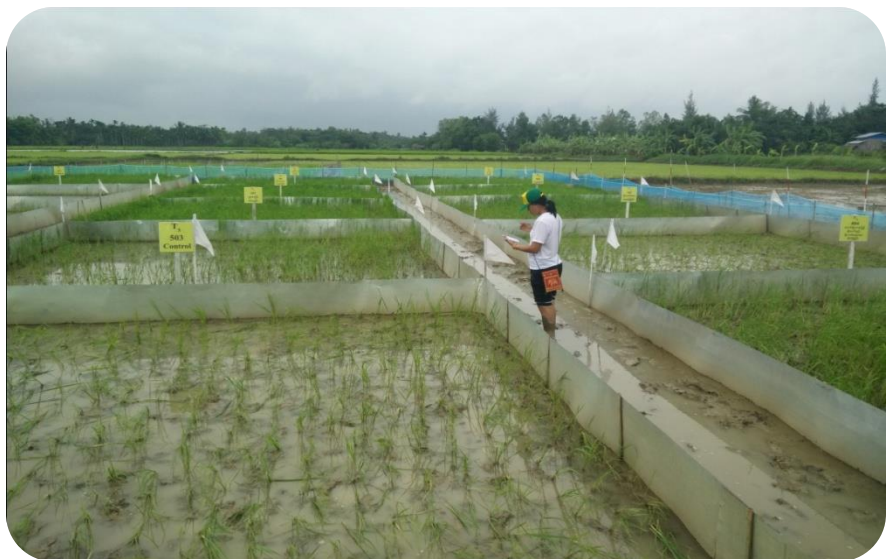
Putting GAS into experimental plot



Giving Different Treatments



Data Collection



Seasonal Situation of experiment



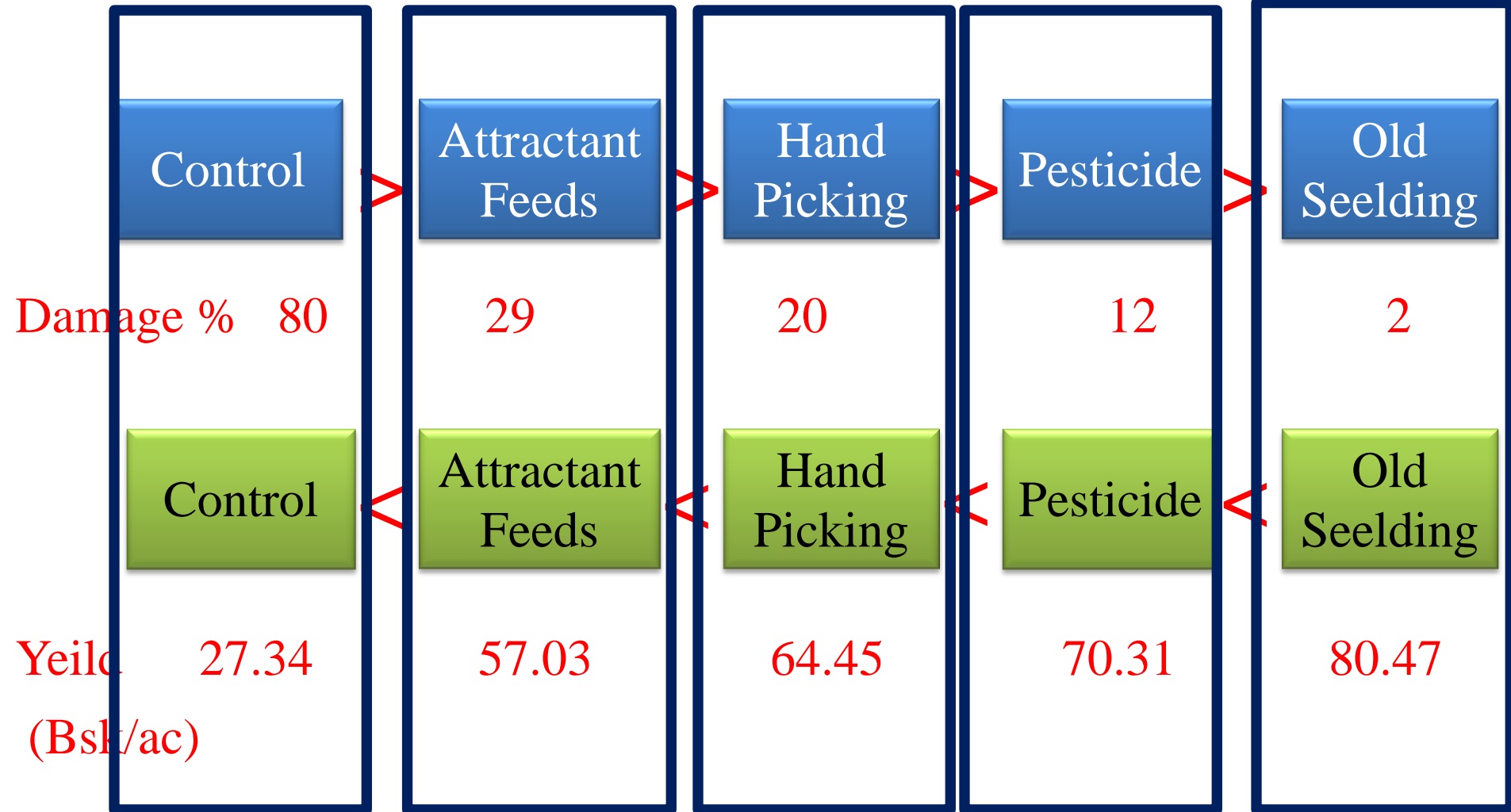
Experimental Results

	Treatments	Damage %				
		R ₁	R ₂	R ₃	R ₄	Average
T ₁	Hand Picking	30	30	15	5	20
T ₂	Use of attractant feeds	29	35	30	22	29
T ₃	Pesticide Use	10	5	5	28	12
T ₄	Using the raised bed (Old Seedling)	2	1	2	3	2
T ₅	Control	99	90	60	71	80

Experimental Results

No.	Treatments	Yield/Acre(Bsk.)				
		R ₁	R ₂	R ₃	R ₄	Average
T ₁	Hand Picking	57.81	54.68	68.36	76.95	64.45
T ₂	Use of attractant feeds	57.03	52.34	56.25	62.50	57.03
T ₃	Use the Pesticide	71.91	76.17	74.21	58.95	70.31
T ₄	Using the raised bed (Old Seedling)	81.29	82.03	78.90	79.66	80.47
T ₅	Controls	7.2	13.67	54.68	41.01	27.34

Discussion



Discussion (Hand Picking)

Advantages`	Disadvantages
No effect on environment	labourious
Use of animal feeds	Scarce Labour
Effective for reducing on population	Not suitable for Big Holder farmers

Discussion(Use of Attractant Feeds)

Advantages`	Disadvantages
Overcome the labour shortage	Cannot collect the snails far from attractant feeds
Low labour cost	Difficult for continuously collect and destroy
No effect on environment	Can not completely destroy egg-masses

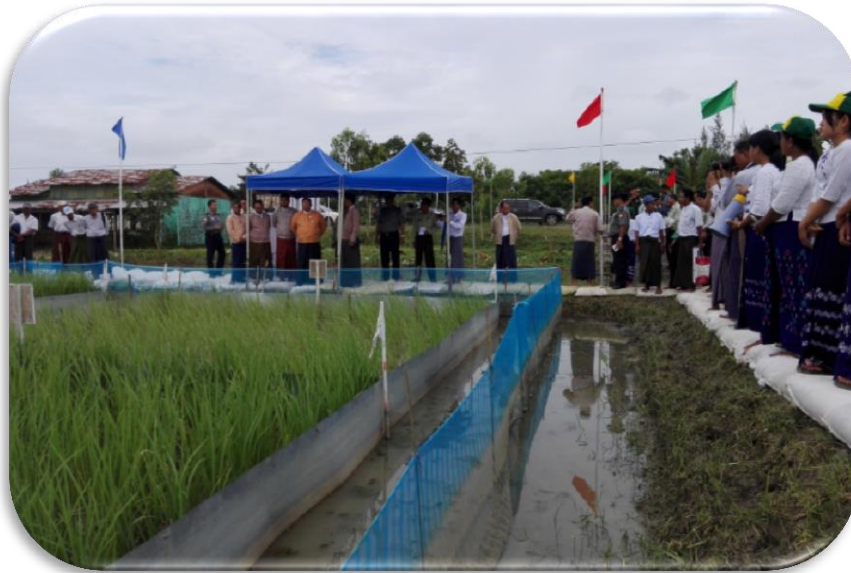
Discussion (Pesticide Use)

Advantages`	Disadvantages
Reducing the labour cost	High cost of snail-cides
Time Saving	In case of incorrect dosage may harm on any other aquatic animals
Effective for big holder farmers	Hazardous to environment

Discussion (Use of Old seedling)

Advantages`	Disadvantages
Little GAS infestation	More transplanting cost
Higher yield	Being no direct control on GAS which may increase in population in next year

Field Day Of Golden Apple Snail in Pyapon Township



Education and Training on GAS



Conclusion And Suggestion

- flooded area, high rainfall with tidal effect
- favourable conditions for GAS outbreak
- require good drainage system, raised bund
- Awareness of GAS nature and damage systems
- Need to destroy GAS egg- masses
- All farmers' participation is essential through IPM
- Should be use of snail- cides in case of under favourable condition
- This experiment should be conduct (T1+T2) or (T1 + T4) in next year



Thank You Very Much

