

INTRODUCTION

Data has shown that the farmers who practiced the six improved management practices or “6 points” obtained yields as high as 40—45 bags per acre.

The six practices are:

1. *Time of sowing*
2. *Planting Density*
3. *Seed treatment*
4. *Early weed control*
5. *Balanced fertilization*
6. *Efficient irrigation water management.*

It should be noted that in order to achieve the best results, all of the practices must be carried out at the right time and using the recommended rate of inputs. Leveled fields would contribute greatly to the results.

Time of planting

Planting must be done at a time so as to allow for the plant to flower during the period of high light intensity, thereby enhancing pollination and grain filling. It should therefore be carried out during the following period:-

- Autumn Crop - May to June
- Spring Crop—November to December



Heading or flowering

Density

The optimum plant population for best yields is approximately 15 to 22 plants per square foot. This would improve tillering, reduce lodging and fungal disease. At higher populations, weak plants are produced which respond poorly to fertilizer. Also increased lodging and greater disease incidence will occur.

Considerations for optimum density :-

- Use seed rate of 80 to 100 pounds per acre at 95% germination
- Seed must be treated.
- Seed must be of C1 or C11 quality.



Seeds packed in 100 pounds bag

Seed Treatment

Plants benefit from seed treatment in the following ways:-

- Protection from early season pest
- Withstand longer period under water.
- Protection from padi bug due to preservation of **beneficial insects, seen below;**



Lady bird beetle

Damsel fly

Spider

Recommendations for seed treatment

Chemicals	Rates
Cruiser	1.25ml/kg seed in 18.6 ml water/ kg seed
Pronto	
Flip	
Sofion	} 0.9 ml in 8.1 ml water/lb of seed
Frip	
Fipronil	

How to treat seeds

- ◇ Padi should be treated at the time of incubation (press/set).
- ◇ Mix chemical in water at recommended rate.
- ◇ Apply mixture to surface of padi using a CP3 knapsack sprayer.



Applying mixture on surface of padi

- ◇ Turn padi with spade to allow those from below to come to the surface.
- ◇ Apply mixture again to ensure all grains come into contact with chemical.
- ◇ Cover padi with bags and proceed to incubate (press) , as per normal for 24-36 hours.



“Pressing” seeds

Note : “Poisoning “of water with pyrethroids is not necessary when treated seeds are used

Weed control

Weed competes with the plant for sunlight, water, nutrients and act as a host for pests and diseases. Strict weed control measures needs to be taken especially in the earlier growth stages (1-3 leaf stage) which is around 15-17 DAS, using post emergent herbicides such as nominee, rice weed killer 2,4-D, etc.. See recommendations on reversed page.



Spraying for weeds

Balanced nutrition

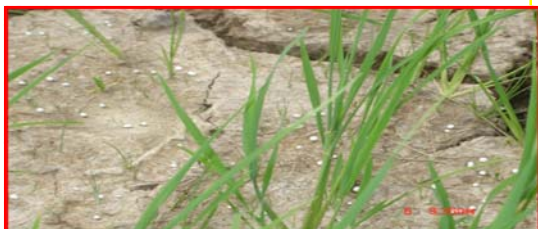
All fertilizer recommendations will be based on soil test. Considerations for applying fertilizer:-

- Phosphorus and potassium should be incorporated before planting or immediately after early draining or about (4-6 DAS).



TSP and MOP before incorporation into soil

- Nitrogen (urea) is generally applied in two doses, for tillering and panicle development.



Urea on dry soil

Tillering stage - Apply 2/3 of the total amount at 14- 21 DAS on dry/moist soil, after weed control.

Panicle Development - Apply (1/3) of total amount when the first joint is 1/2" to 1" in length, i.e. around 40 to 42DAS. Depending on variety, fertilizer should be broadcasted in low levels of water.

Water Management

Fields should be irrigated within 3 to 5 days after broadcasting of urea, after which they must not be allowed to dry until final draining, as this will lead to severe nitrogen loss.



Irrigating field

Advisory

The six point practice is demonstrated in more detail at Farmer's Field School sessions, field days and seminars. Farmers are advised to take full advantage of these facilities in their respective regions. Kindly contact the regional extension officers for more information.

Recommendations for weed control

Types of weeds	Weedicides (Herbicides)	Application Rate	Comments
Jhussia, wild clove, water sedge, & umbrella sedge	2,4-D	36-72 mlis/knapsack	Use 4 knapsack sprayer/acre. Spray when crop is bet. 3&5 weeks old.
Schoonord grass, monkey tail, Muraina grass, bird seed grass along with sedge and broad leaf weeds.	NOMINEE	40 to 60 ml/acre	Use 10-12 ml/knapsack sprayer with 10 to 15 ml sticker.
	DESIGNEE	80 to 100 ml/acre	Use 20-25 ml/knapsack sprayer with 10-15 ml sticker.
Soap bush, along with some sedge and broad leaf weeds.	RICE WEED KILLER	60 to 80 ml/acre	Use 16-24g/knapsack sprayer when crop is between 3&5 weeks old.
	2,4-D+PROPANIL	140 mlis Propanil +72 mlis 2,4-D/knapsack	Use 72 ml, 24-D with 140 ml Propanil as a tank mixture/knapsack sprayer.
Duckweed	ALLY	5g/acre	Use 1.0 g-1.25g in one knapsack sprayer of water.

Notes



Prepared by Kuldip Ragnauth and Edward Pulver
in collaboration with Common Fund for Commodities (CFC).



GUYANA RICE DEVELOPMENT BOARD
116-117 Cowan Street, Kingston, Georgetown.
Tel: 592-225-8717 Fax: 592-225-6486
Email: info@grdb.gy Website: www.grdb.gy

